

№2 – Amaliy mashgʻulot



Operasion tizimlar, ularning turlari.



Ishning maqsadi:

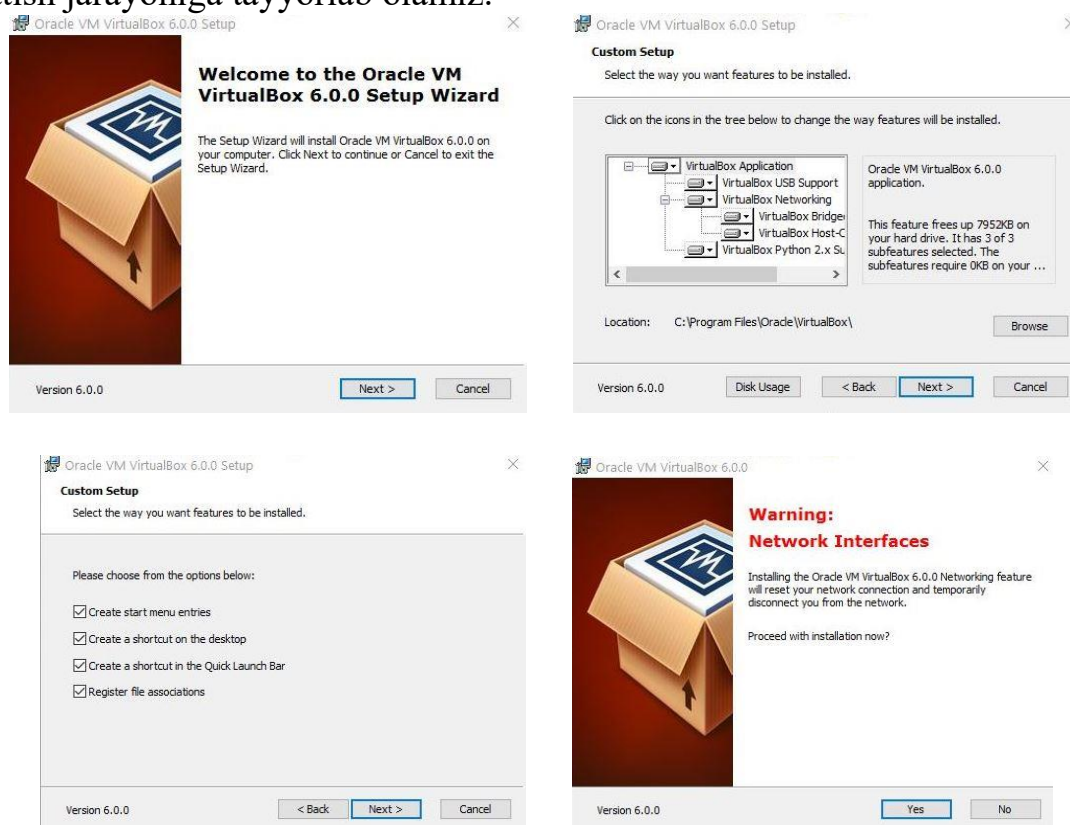
VirtualBox 6.0.0 dasturini oʻrnatish hamda ishchi maydinni hosil qilib Windows XP, Windows 7 operatsion tizimini oʻrnatish va sozlash, zamonaviy axborot texnologiyalarining oʻquv – texnik vositalari kompyuter va ulardan foydalanish imkoniyatlari bilan tanishish.

Qisqacha nazariy maʼlumotlar:

Ishni boshlash uchun bizga **VirtualBox 6.0.0** dasturi kerak boʻladi. Ushbu dasturni kompyuterga oʻrnatib olamiz. Demak dasturni oʻrnatish quyidagicha amalga oshiriladi.

Dastur ustida sichqonchanning chap tugmasini 2 marta bosib ishga tushirib olamiz. Natijada quyidagi oyna ochiladi.

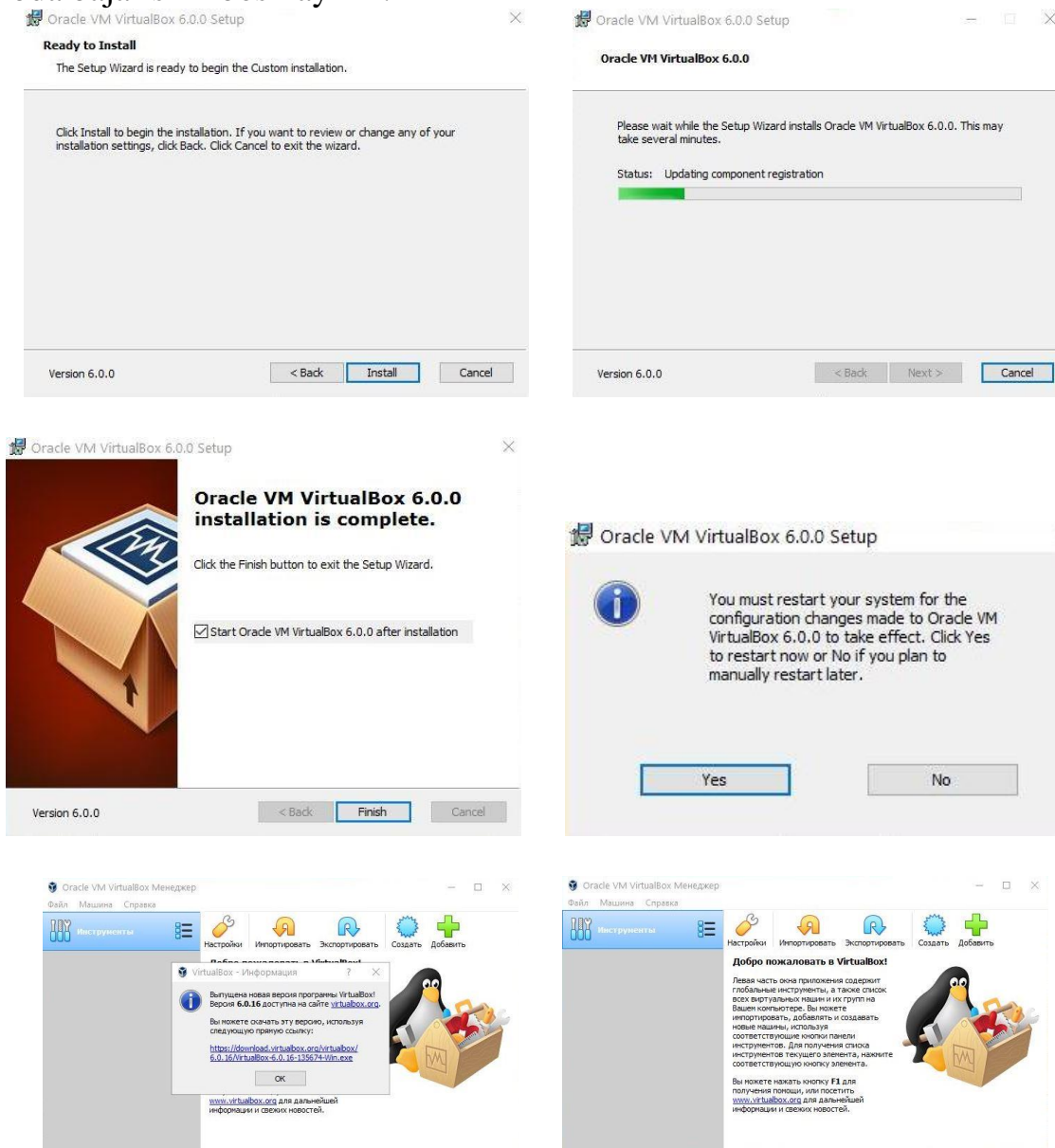
Dasturning hamma sozlamalarini avtomatik holatda qoldirib **Next** tugmalarini ketma – ketlikda bosib soʻngra **Yes** tugmasini bosish orqali dasturni oʻrnatish jarayoniga tayyorlab olamiz.



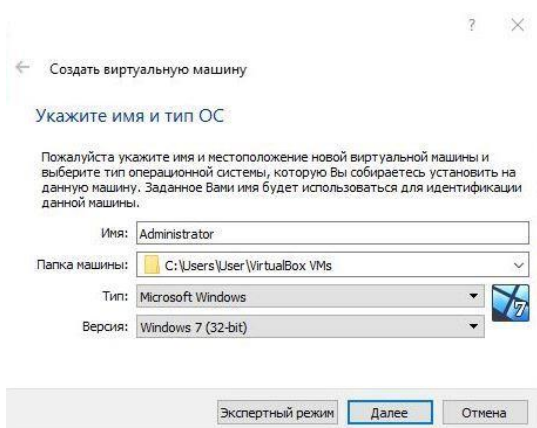
Dastur oʻrnatilish jarayoniga tayyor holatga kelganidan soʻng **Install** va oʻrnatilish tugagandan soʻng **Finish** va **Yes** tugmalarini bosib ishni yakunlaymiz. Natijada bizga dastur bilan ishlovchi muloqot oynasi paydo boʻladi. Endi bu oynada virtual kompyuterlarni shakillantiramiz.

Virtual kompyuterlar bizga **Windows** va **Linux Ubuntu** operatsion tizimlarini tajriba maydonchasida oʻrnatish uchun kerak boʻladi. Amaliy

mashg'ulot darsimizning mazmuni ham shundan iborat. Demak ishni quyidagi tartibda bajarishni boshlaymiz.

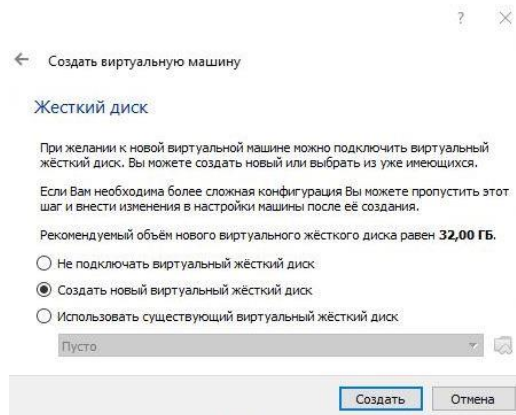
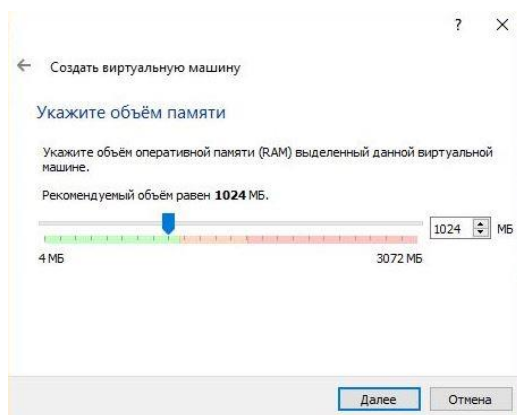


Bu oynada virtual kompyuterni nomini **Имя** bo'limiga, joylashinuv manzilini esa **Папка машины** bo'limiga ko'rsatamiz. Operatsion tizimning turini **Тип** bo'limiga, operatsion tizim razryadini **Версия** bo'limiga ko'rsatamiz. So'ngara **Далее** tugmasini bosib keyingi oyna sozlamalariga o'tamiz.



Keyingi oynadan kompyuterimizning operativ hotirasidan kelib chiqib **RAM** hotira hajmini belgilaymiz va **Далее** tugmasini bosamiz.

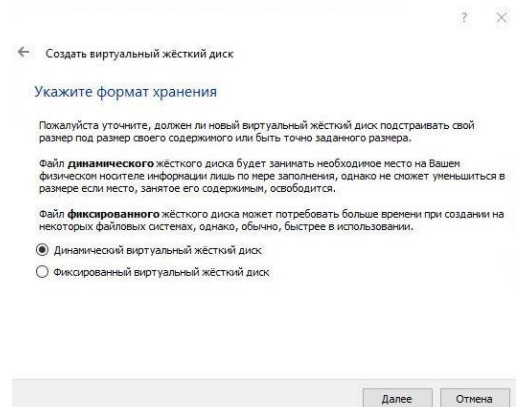
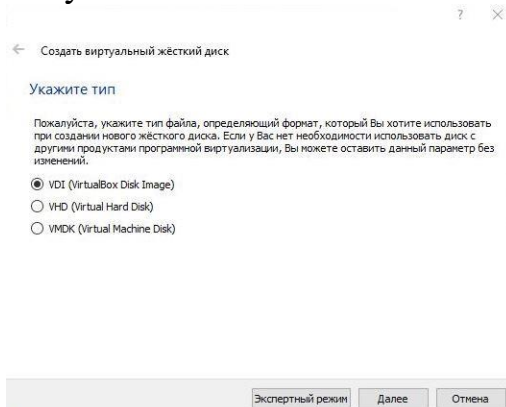
Navbatdagi oynadan esa virtual kompyuterimizga qattiq diskini hotira hajmini belgilaymiz va **Создать новый виртуальный жёсткий диск** parametrini tanlab **Создать** tugmasini bosib navbatdagi oynaga o'tamiz.



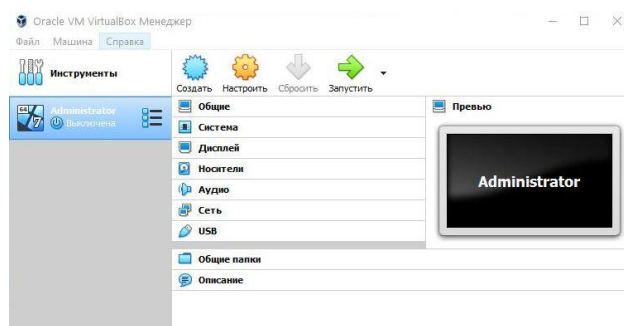
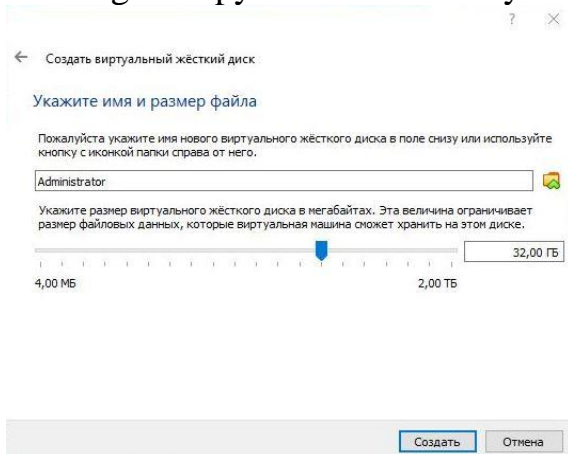
Bu oymadan esa **VDI** ya'ni (**VirtualBox Disk Image**) **Tun** bandini tanlab **Далее** tugmasini bosamiz.

Navbatdagi oynadan **Динамический виртуальный жёсткий диск** bo'limini tanlaymiz va **Далее** tugmasini bosamiz.

Bu bo'limni tanlashimizdan maqsad keyinchalik ish jarayonida bizga ma'lum bir hotira sig'imi kerak bo'lsa bemaolol kompyuterimizning qolgan bo'sh joyidan foydalanishimiz mumkin bo'ladi.

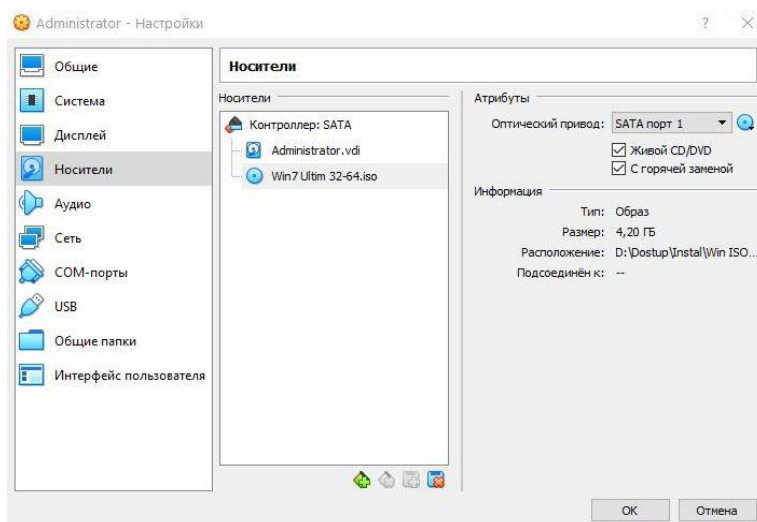
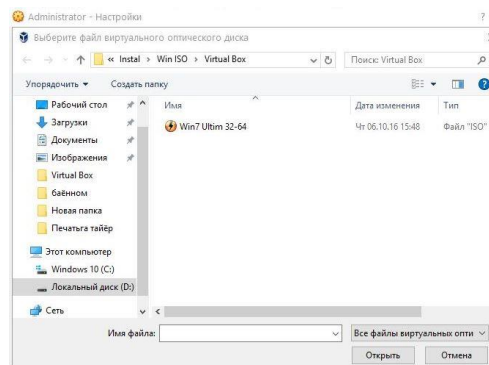
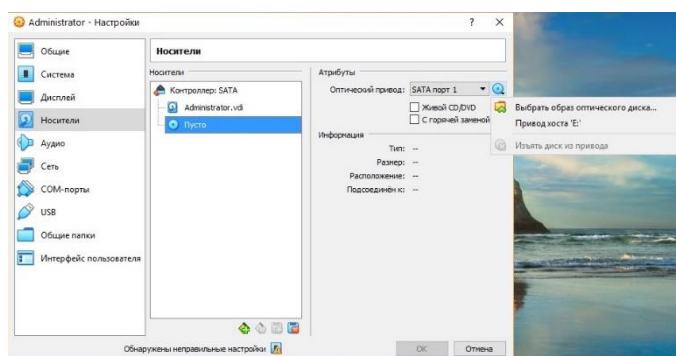


Quyidagi so'nggi oynadan qattiq diskimizning nomi va hotira hajmini belgilab **Создать** tugmasini bosib ishni yakunlaymiz. Natijada bizga virtual holatdagi kompyuterimiz ishchi oynasi paydo shakillanadi.




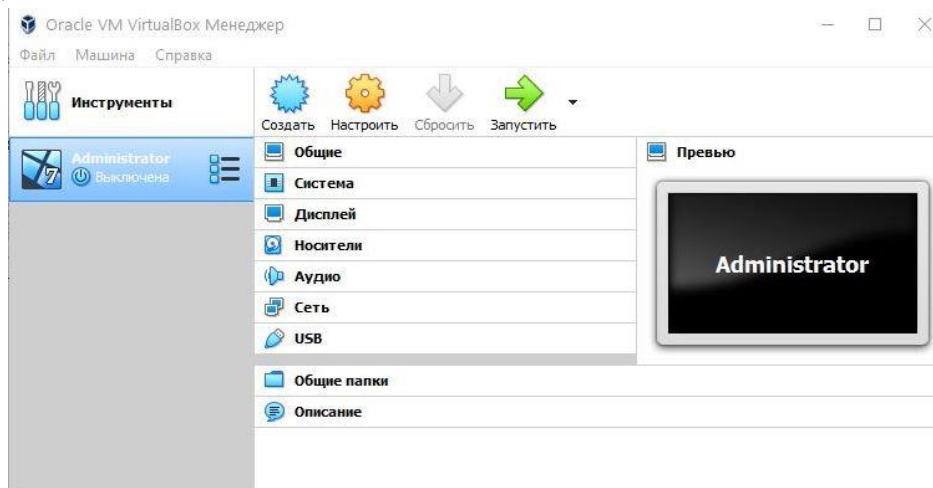
Endi **Windows 7** operatsion tizimini ushbu virtual kompyuterimiz hotirasiga o'rnatish tartibini ketma – ketligini ko'rib o'tamiz. Bunda **Настройка** bo'limidan **Носители** bandiga kirib u yerdan disk ko'rinishidagi virtual disk yurituvchi tanlanadi. Disk yurituvchi piktogrammasi yonida **Пусто** yozuvi mavjud. Bu degani hali disk yurituvchining ichiga disk solingani yo'q degani. Biz bu disk

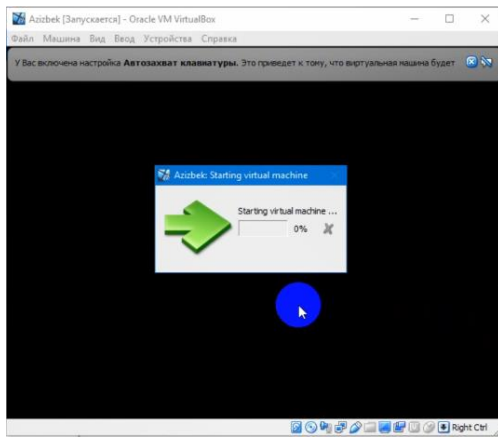
yurituvchini tanlaganimizdan so'ng oynaning o'ng qismida **Атрибуты** bo'limidan **Оптический привод SATA порт 1** qismiga **ISO** formatda yozilgan **Windows 7** obrazi manzilini ko'rsatib **Живой CD/DVD** va **С горячей заменой** yozuvlari oldiga ushbu belgini qo'yganimizdan so'ng **Ok** tugmasi aktiv holatga keladi va ushbu **Ok** tugmasini bosib tasdiqlaymiz.



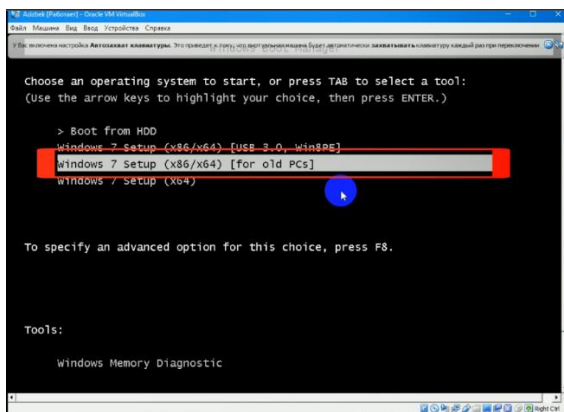
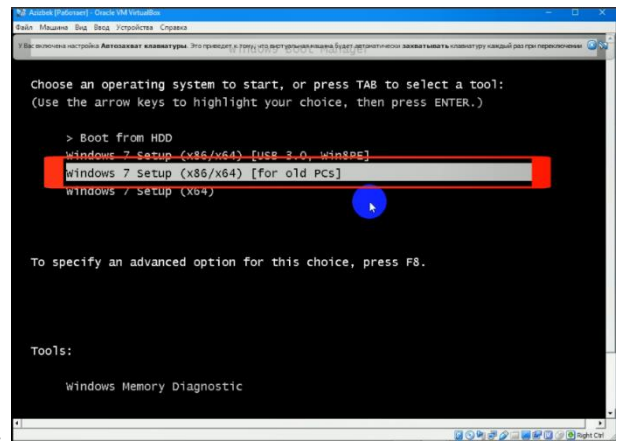
Mana virtual kompyuterimiz **Windows 7** operatsion tizimini yuklashga tayyor holatga keldi. Endi birgina  **Запустить** tugmasini bosishimiz qoldi halos.

 **Запустить** tugmasini bosamiz va **Windows 7** operatsion tizimi o'rnatila boshlaydi.

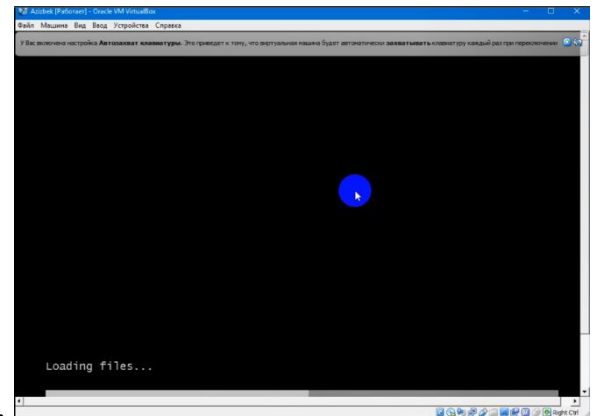




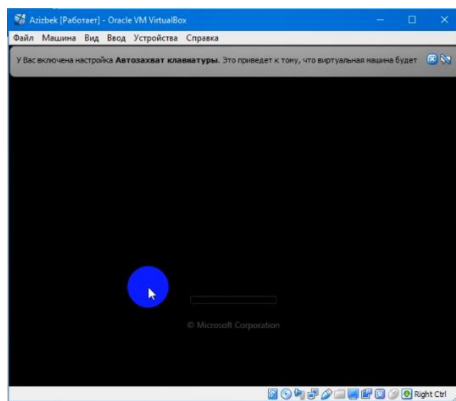
2.



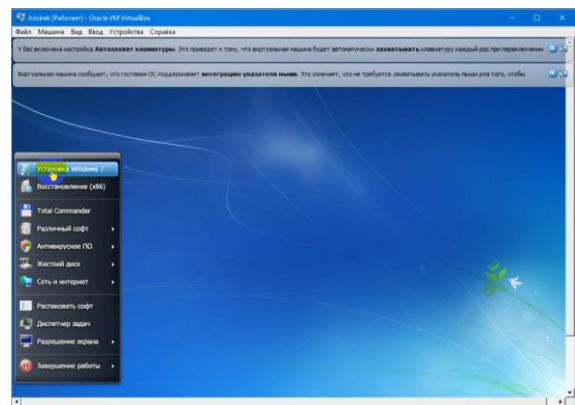
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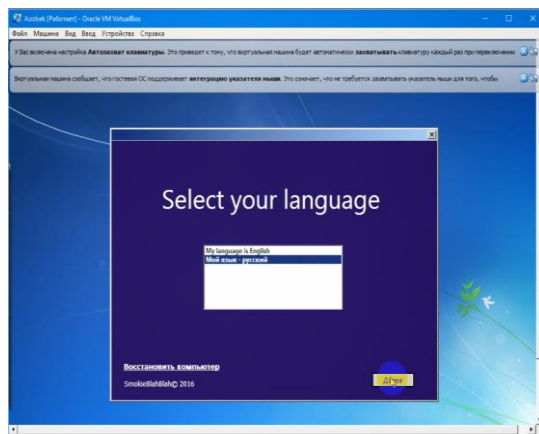
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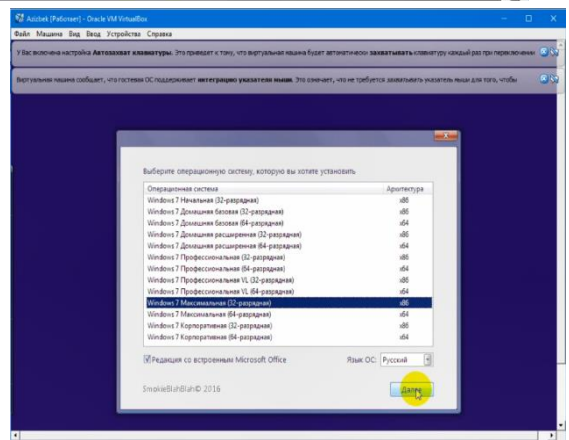
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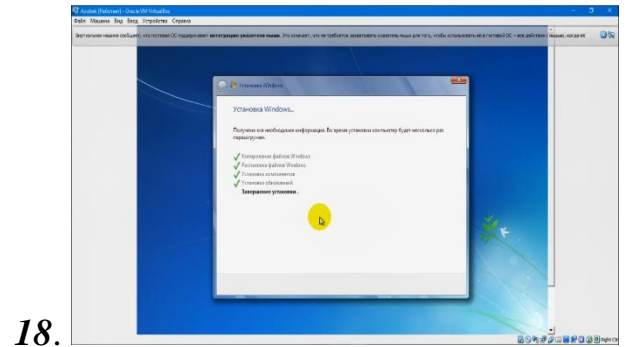
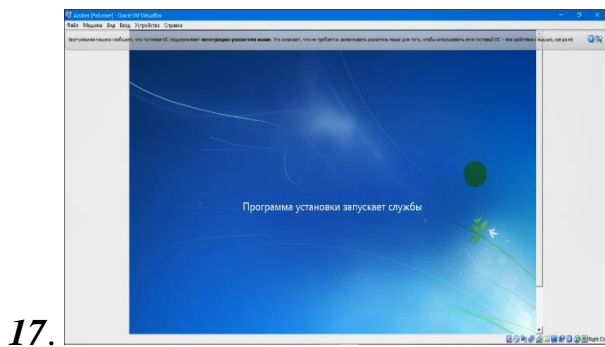
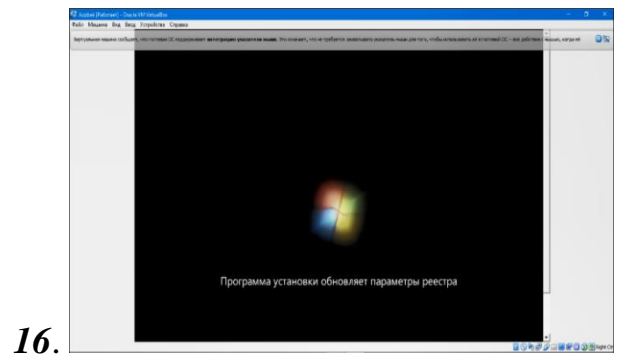
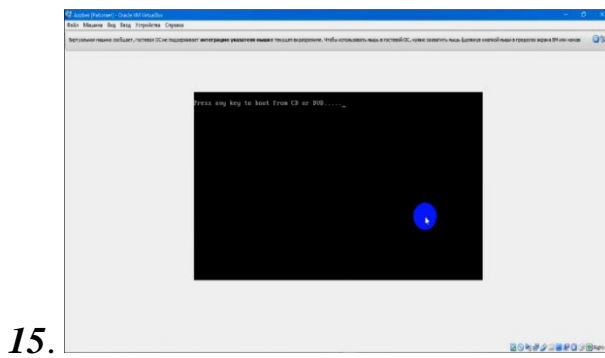
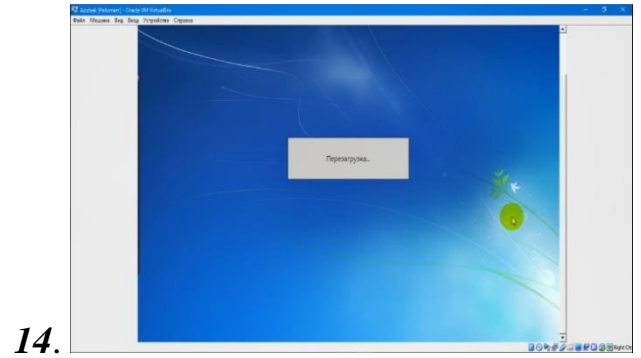
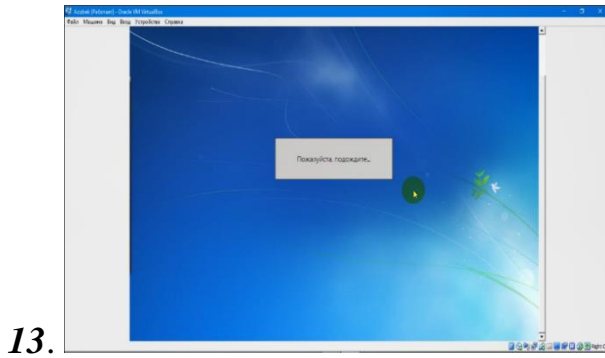
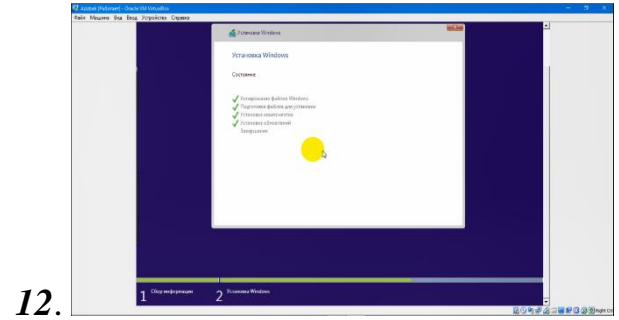
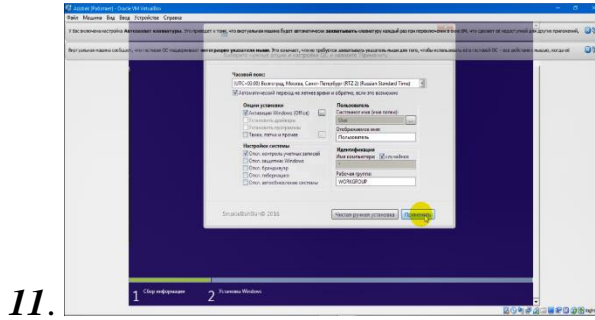
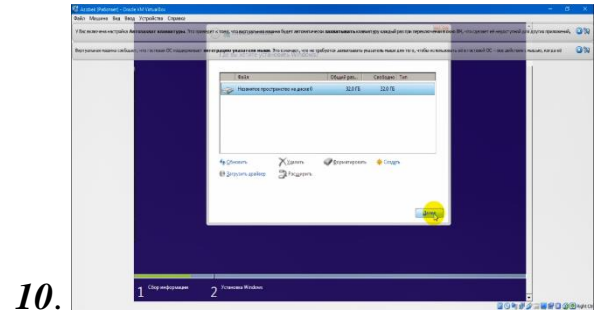
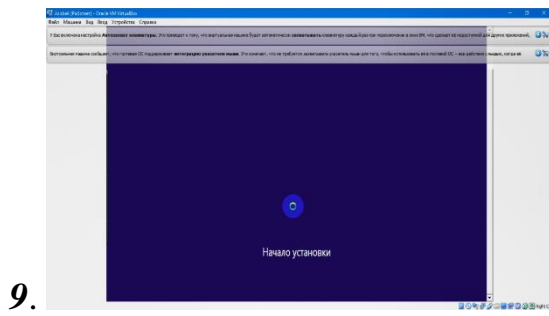
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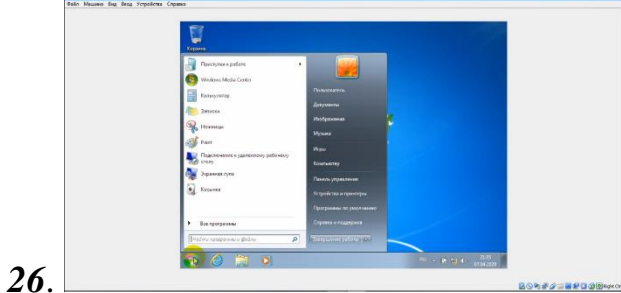
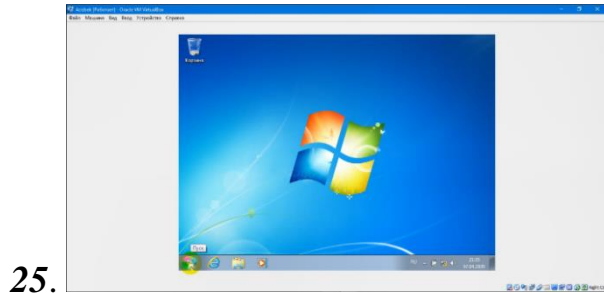
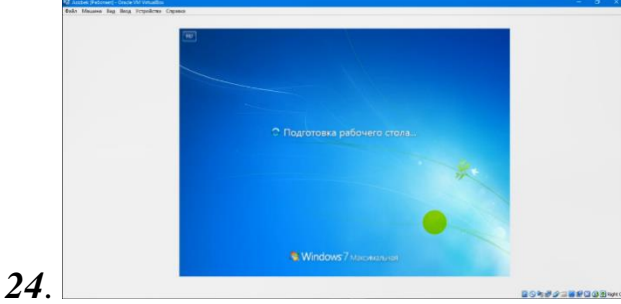
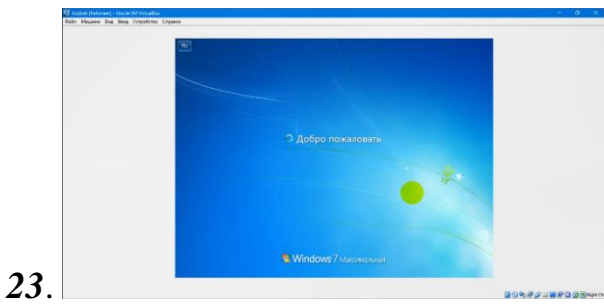
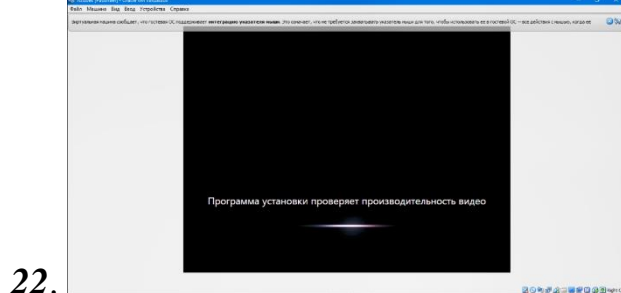
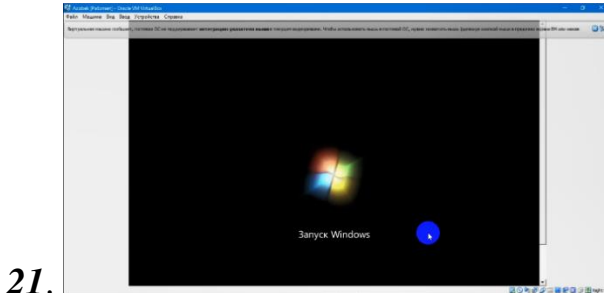
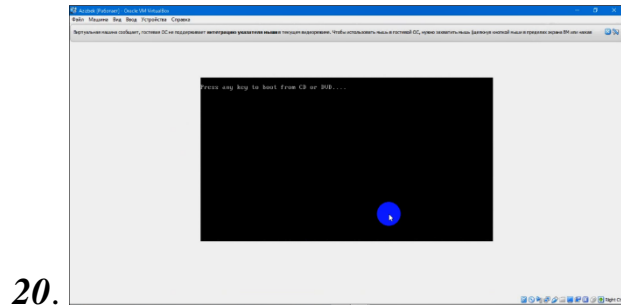
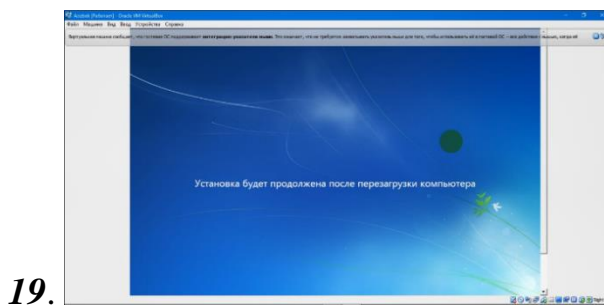


7.



8.





Windows 7 operatsion tizimini o`rnatish jarayoni tugadi.

Mana endi **Windows XP** operatsion tizimini o`rnatishni ko`rib o`tamiz. **Windows XP** operatsion tizimini o`rnatishda master mavjud qurilamalrni avtomatik tarzda tekshiradi va mumkin konfliktlar xaqida habar beradi. **Windowsa XP** ni yuklovchi kompakt-disklar orqali o`rnatishda kompyuter **BIOSi CD/DVD-ROM** orqali yuklashga ruhsat bergan bo`lishi kerak. Buni **BIOS** orqali sozlash mumkin. Zamonvay kompyuterlarda **CD/DVD-ROM** orqali yuklash sozlangan bo`ladi. Keling, **Windows XP** ni **CD/DVD-ROM** orqali o`rnatishni ko`rib chiqamiz:

1-Yuklovchi CD/DVD diskni **CD/DVD-ROM** ga qo`yamiz va kompyuterni qayta yuklaymiz. Agar **BIOS** da **CD/DVD-ROM** orqali yuklashga ruhsat berilgan bo`lsa kompyuter **CD/DVD** diskdagi sistema orqali yuklanadi. Bunda foydalanuvchiga **Widows** ni o`rnatuvchi master dan tashqari turli hil utilitalar,

ya`ni qattiq disk bilan, **BIOS** bilan, parollar bilan ishlovchi utilitalar, antiviruslar, arxivatorlar, navigatorlar ni ishlatish mumkin. Taxminan quyidagi rasmda berilgan holatdagidek:

2-Windows ni o`rnatuvchi masterni yuklaymiz. Bunda kompyuterda dinamik yuklanish jarayoni sodir bo`ladi:



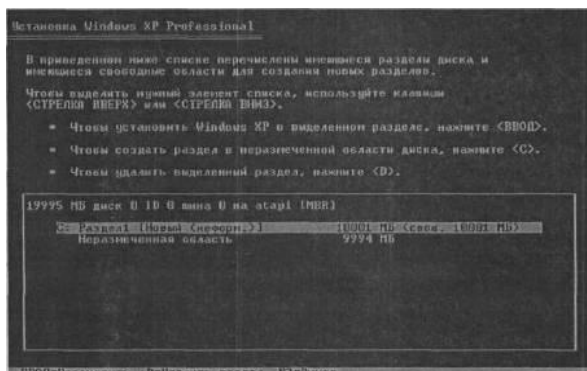
3-Shundan so`ng o`rnatishnign ilk bosqichlari boshlanadi. Bunda litsenziya kelishivi ekranda chiqadi, **F8** bosildi. Bazi disklarda litsenziya kelishuv qismi olib tashlangan bo`lishi ham mumkin:



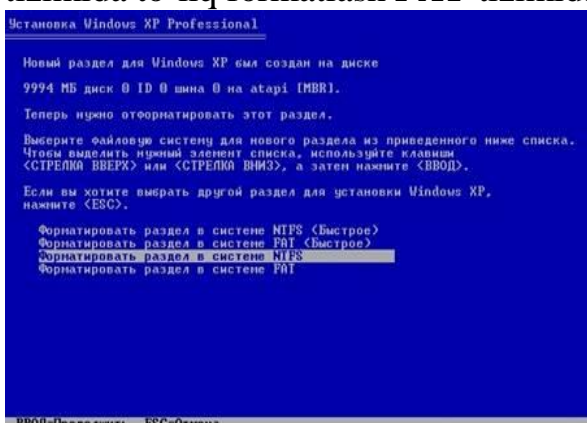
4-Quyidagi ishlarni bajarish mimkin: **Windows** ni o`rnatish uchun [**Enter**] Tiklash konsoli yordamida **Windows** ni tuzatish [**R**] O`rnatish dasturidan chiqish [**F3**]:



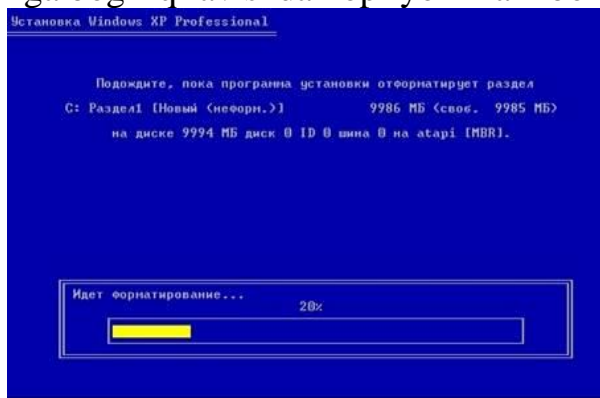
5-[Enter] ni bosib o`rnatishda davom etamiz: Bunda mavjud qattiq diskdagi bo`limlardan birini tanlash kerak. Bu bo`limga **Windows** OT o`rnatildi. Bo`limda albatta kamida **15 Gb** joy bo`lishi kerak. **Windows** ni tanlangan **раздел** ga o`rnatish uchun [**Enter**] Yangi **раздел** hosil qilish uchun klaviaturadan [**C**] ya`ni (**Создать раздел**) tugmasini bosamiz. Tanlangan **раздел** ni o`chirish uchun esa klaviaturadan [**D**] ya`ni (**Удалить раздел**) tugmasi bosiladi:



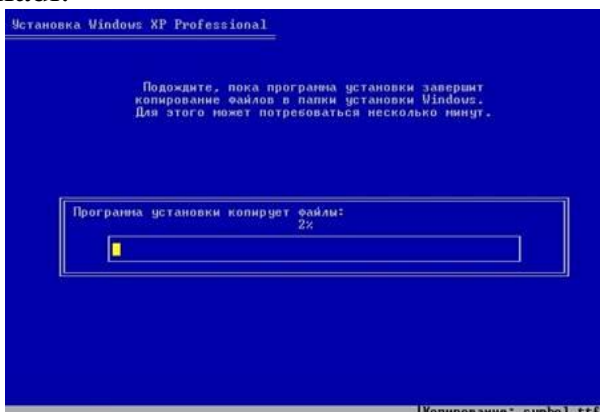
6-[Enter] ni bosib o`rnatishda davom etamiz: Tanlangan *раздел* ni formatlaymiz. Bunda quyidagi usullar taklif etiladi: *NTFS* tizimida tez formatlash *FAT* tizimida tez formatlash *NTFS* tizimida to`liq formatlash *FAT* tizimida to`liq formatlash:



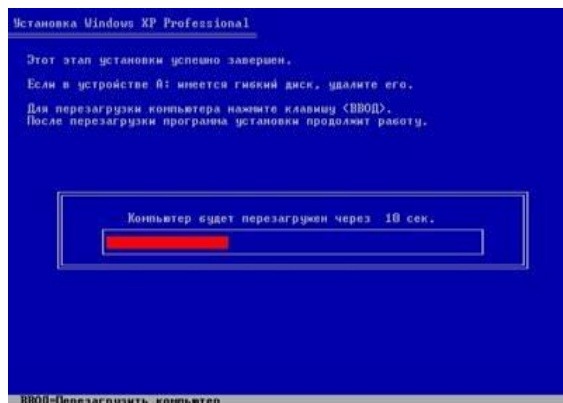
7-*NTFS* tizimida to`liq formatlashni tanlab davom etamiz: bunda formatlash vaqti tanlangan razdel xajmiga bog`liq ravishda kop` yoki kam bo`ladi.



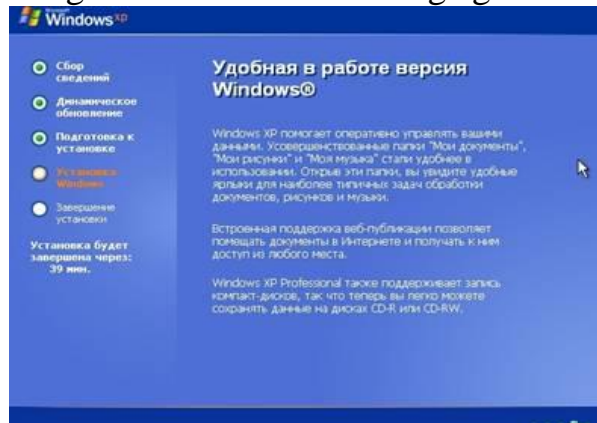
8-Formatlash jarayoni tugaydi va masterni yuklash uchun zarur bo`lgan fayllar qattiq diskka ko`chiriladi:



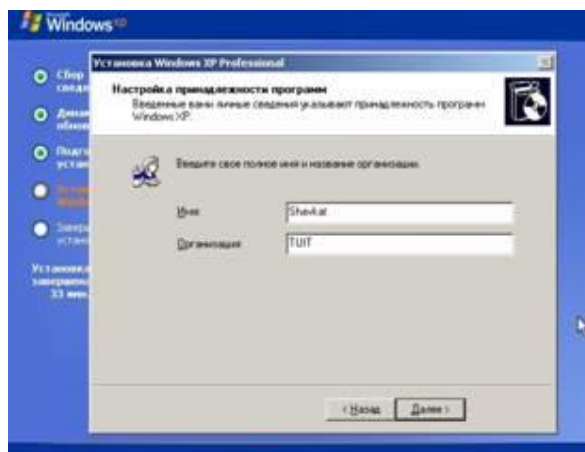
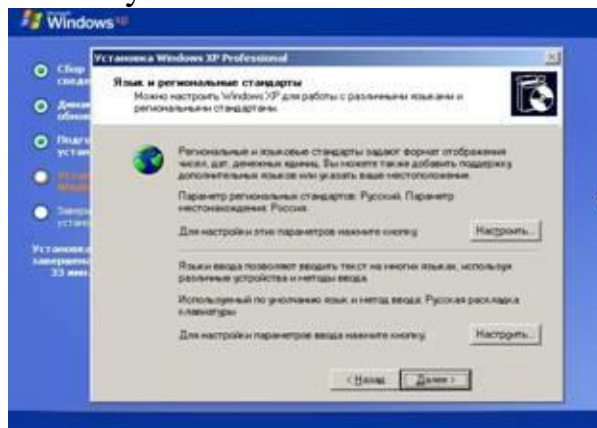
9-Kompyuter qayta yuklanadi:

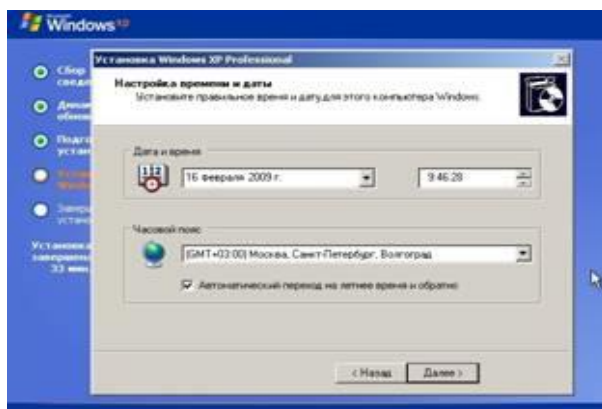


Qayta yuklangandan so`ng o`rnatuvchi master ishga garafik rejimda tushadi:



10-О`rnatish jarayonida master foydalanuvchidan kerakli sozlashlarni (hududiy parametrlarni, fodalunvchi va tashkilot nomini, vaqt va sanani, tarmoq parametlarini) kiritishni so`raydi:

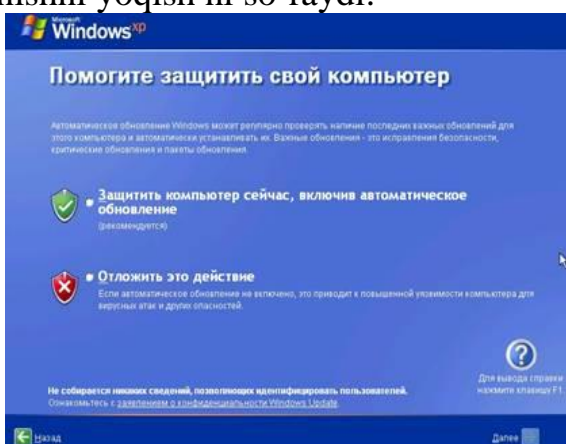




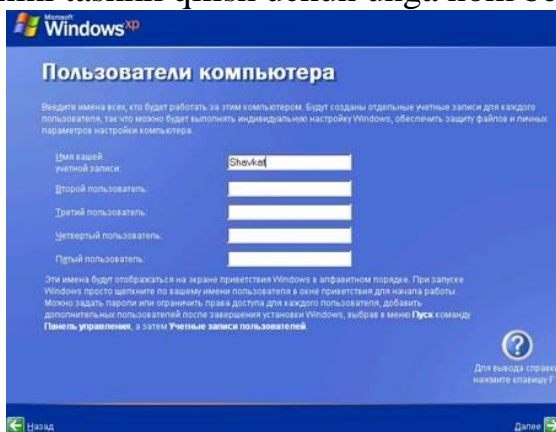
11-Master o`z ishni yakunlaydi va kompyuter qayta yuklanadi hamda birinchi bor Windows ishga tushadi [Далее] bosiladi:



12-Avtomatik yangilanishni yoqish ni so`raydi:



13-Yangi foydalanuvchini tashkil qilish uchun unga nom beriladi:



14-Va nihoyat foydalanuvchi ish stoli ishga tushadi:



Amaliy mashg'ulotlarini o'tkazish qoidalari va xavfsizlik choralari.

Berilgan nazariy ma'lumot bilan tanishib chiqiladi va topshiriqlar variantlari ketma-ket bajariladi va natijalar olinadi.

Kompyuter xonasida xavfsizlik texnikasi qoidalari va sanitariya – gigiyena talablariga amal qilinadi.

Topshiriqlar variantlari (masala, misol, keyslar).

1. Windows XP operatsion tizimini VirtualBox dasturi orqali o'z kompyuteringizda o'rnatib rasm holatida taqdim eting va tushuntirib bering.
2. Windows 7 operatsion tizimini VirtualBox dasturi orqali o'z kompyuteringizda o'rnatib rasm holatida taqdim eting va tushuntirib bering.

Nazorat savollari.

1. Windows XP, 7 operatsion tizimlarining bir – biridan farqi qanday?
2. Windows operatsion tizimining asoschisi kim?
3. Windows operatsion tizimini kompyuterning hotirasiga yozish uchun qaysi axborot tashuvchi qurilmalardan foydalaniladi?
4. Qanday operatsion tizim turlarini bilasiz?
5. Operatsion tizimni o'rnatishda operativ hotiraning ro'li nimadan iborat?
6. Mikroprotssessorning vazifasi nimalardan iborat?
7. Monitorning vazifasi nimalardan iborat?