

Practical 07

Installing Windows 7 operating system using bootable disc and USB

Objectives

- To be able to install Windows 7 via bootable Disc.
- To be able to install Windows 7 via bootable USB stick.
- To be able to create bootable USB stick.

Tools

- Bootable Windows 7 DVD.
- USB, Windows 7 ISO image, Windows 7 ISO image.
- Power ISO.

Keywords:Windows, USB, Bootable, Installation.

Duration:03 hours

7 Introduction

7.1 Microsoft Windows 7

Windows 7 is a personal computer operating system developed by Microsoft, a version of Windows NT. Development of Windows 7 occurred as early as 2006 under the codename "Blackcomb". Windows 7 was released to manufacturing on July 22, 2009, and became generally available on October 22, 2009, less than three years after the release of its predecessor, Windows Vista. Windows 7's server counterpart, Windows Server 2008 R2, was released at the same time.

Windows 7 was primarily intended to be an incremental upgrade to the operating system, intending to address criticisms faced by its predecessor, Windows Vista (such as performance improvements), whilst maintaining compatibility with hardware and software designed for Vista. While retaining a similar appearance to Vista, 7's interface was streamlined, with the addition of a redesigned taskbar that allows applications to be "pinned" to it, and new window management features. Other new features were added to the operating system, including libraries, the new file sharing system HomeGroup, and support for multitouch input. A new "Action Center" interface was also added to provide an overview of system security and maintenance information, and tweaks were made to the User Account Control system to make it less intrusive. 7 also shipped with updated versions of several stock applications, including Internet Explorer, Windows Media Player, and Windows Media Center.



7.2 Procedure

7.2.1 Setting PC to be able to boot from a DVD

In order to install Windows 7 from the bootable DVD you must follow these steps:

Step 01: Turn on the computer (Restart if already started).

Step 02: Open the BIOS settings of the PC (See your PC specifications).

Step 03: Go in to Boot Order/Boot Sequence option.

Step 04: Change the Boot Order to have CD/DVD Rom as first bootable device.

Step 05: Save and Exit the BIOS settings.

Step 06: Insert the bootable DVD and restart the PC.

7.2.2 Setting PC to be able to boot from a USB

In order to install Windows 7 from the bootable USB you must follow these steps:

Step 01: Turn on the computer (Restart if already started).

Step 02: Open the BIOS settings of the PC (See your PC specifications).

Step 03: Go in to Boot Order/Boot Sequence option.

Step 04: Change the Boot Order to have USB as first bootable device.

Step 05: Save and Exit the BIOS settings.

Step 06: Plugin the bootable USB in to USB port and restart the PC.

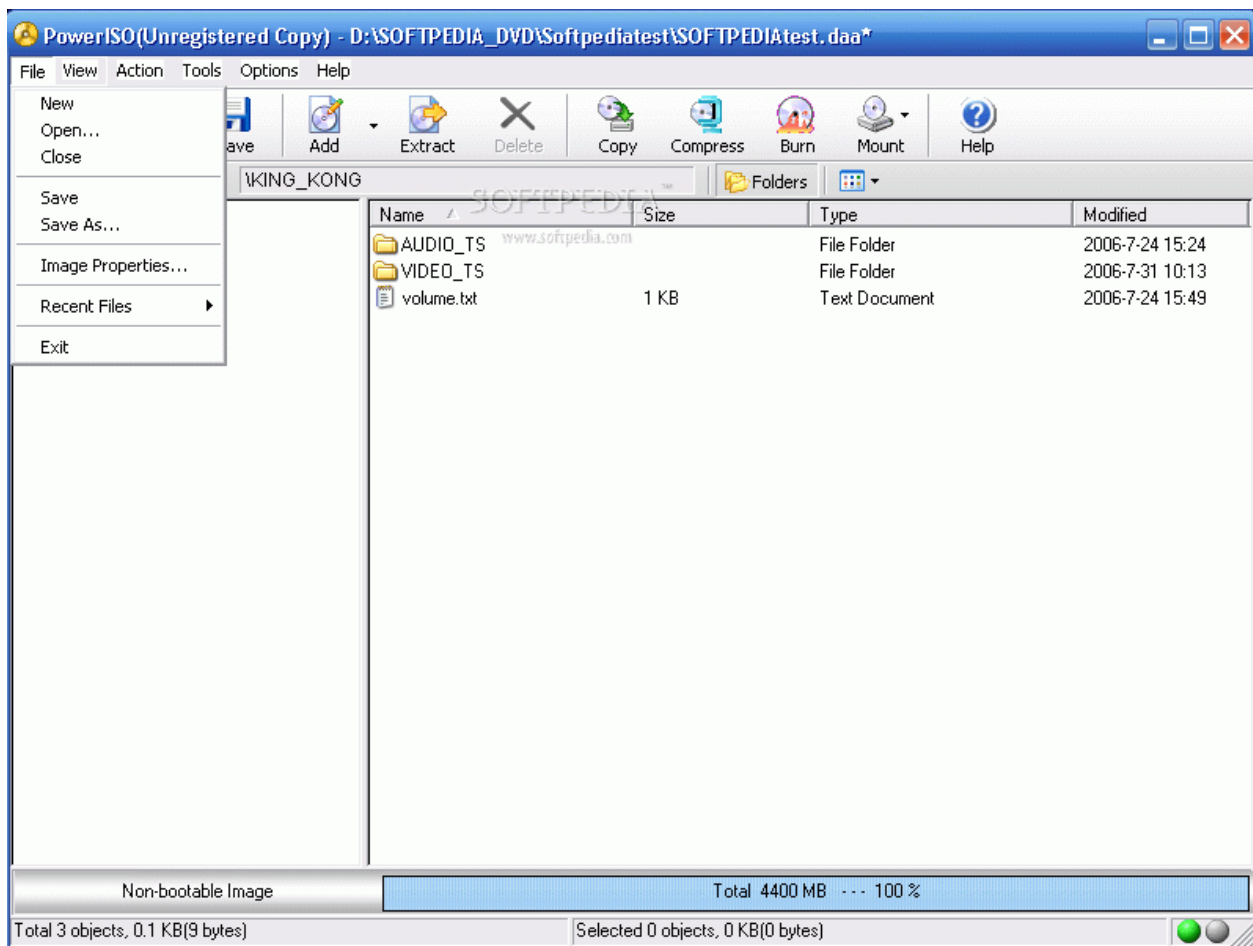
7.2.3 Creating bootable USB

In order create a bootable USB follow these steps:

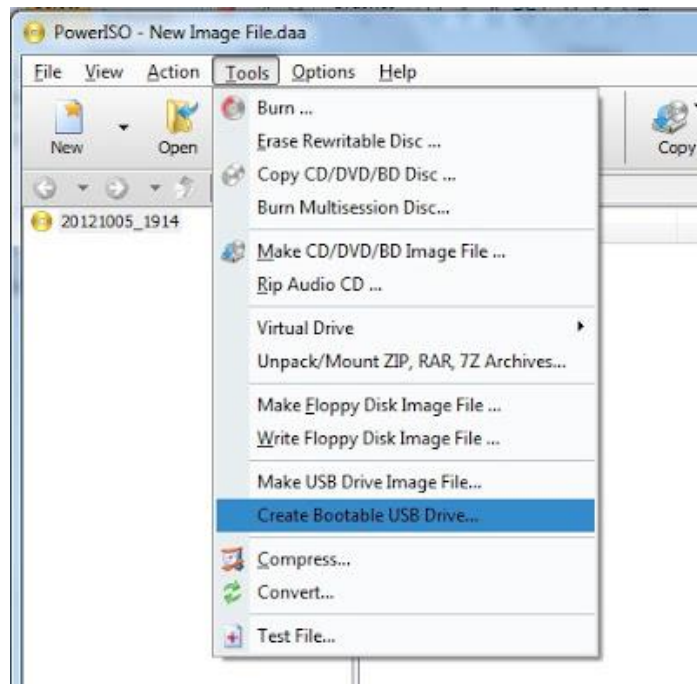
Step 01: Download PowerISO.



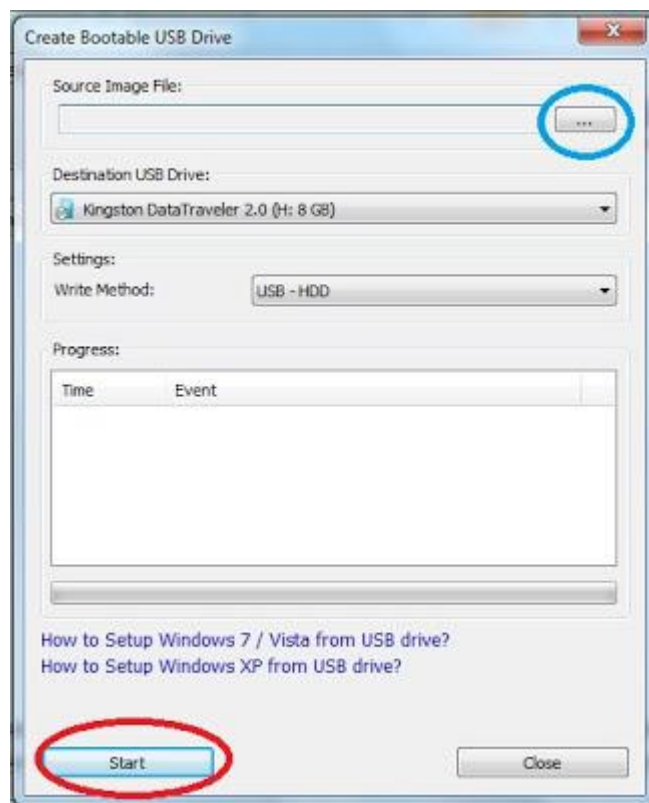
Step 02:Install and run PowerISO.



Step 03:Choose the menu "Tools > Create Bootable USB Drive". The "Create Bootable USB Drive" dialog will popup. If you are using Windows Vista or Windows 7 / 8 operating system, you need confirm the UAC dialog to continue.



Step 04:Select the correct USB drive from the "Destination USB Drive" list if multiple USB drives are connected to the computer.

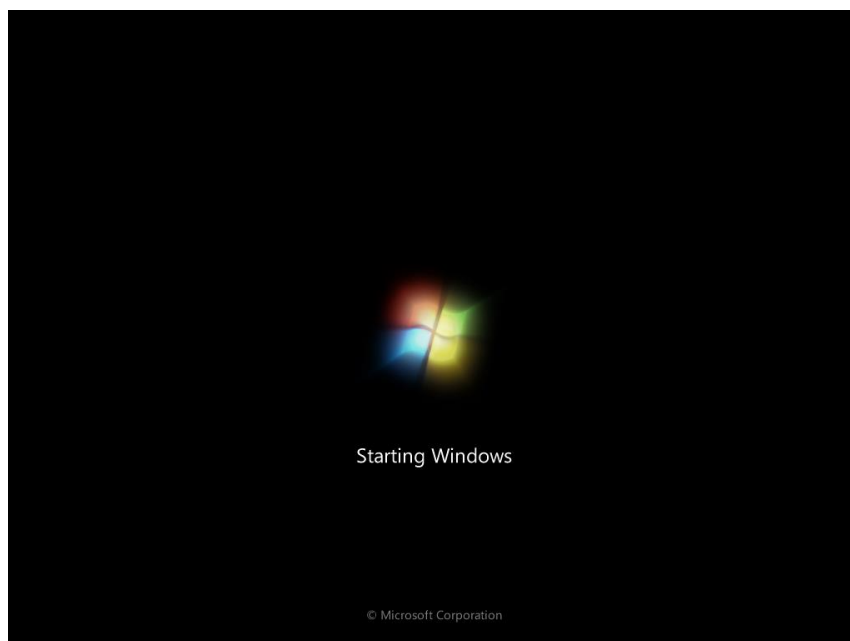
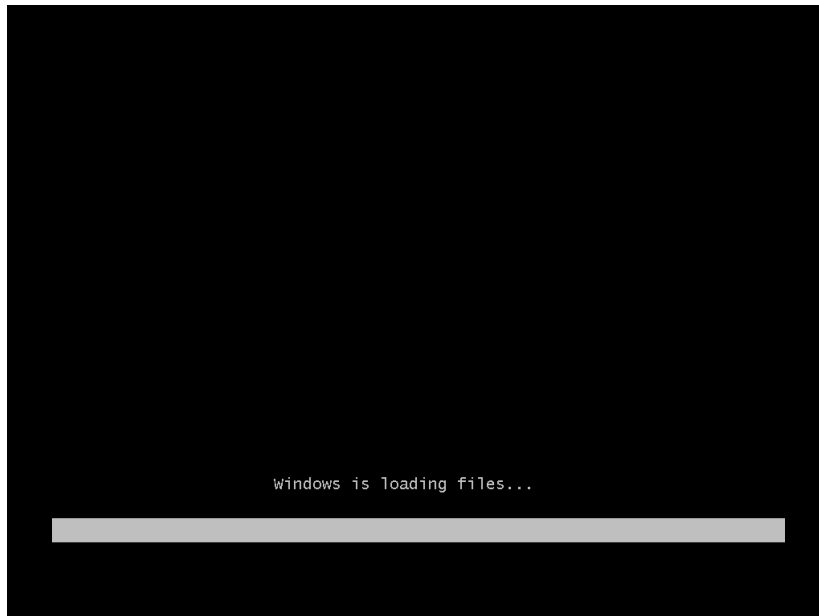


Step 05:Choose the proper writing method. "USB-HDD" is recommended.

Step 06:Click "Start" button to start creating windows 7 bootable USB drive.

7.2.4 Installing Windows 7

Step 01: Either boot from bootable USB or bootable DVD. It will now load the setup files.



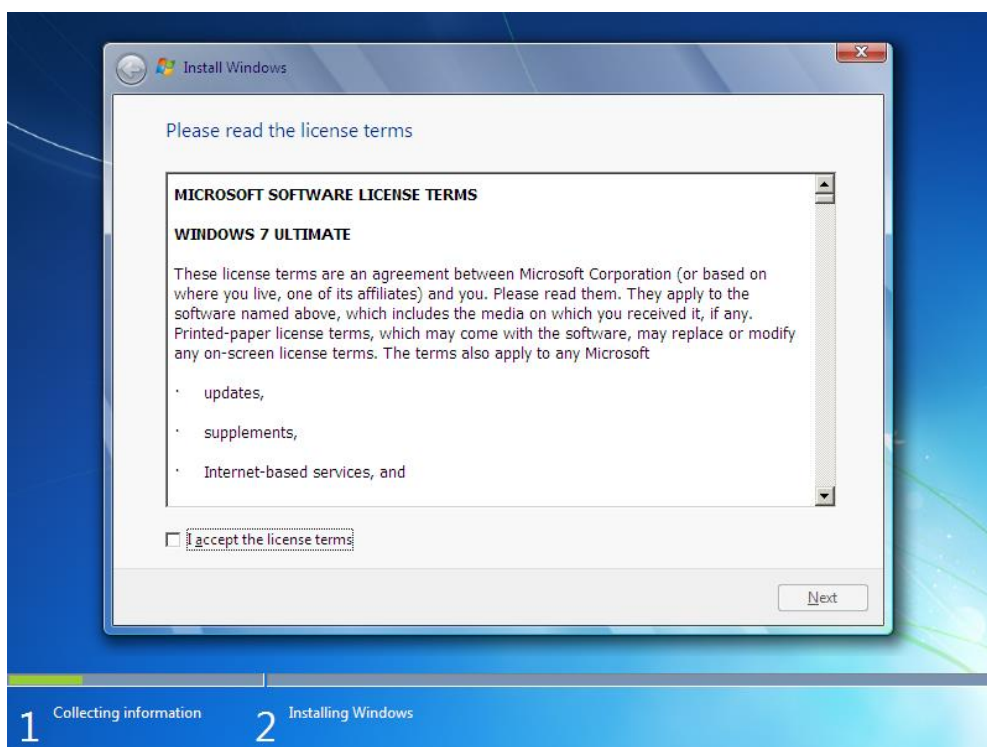
Step 02: Select your language, time & currency format, keyboard or input method and click Next.



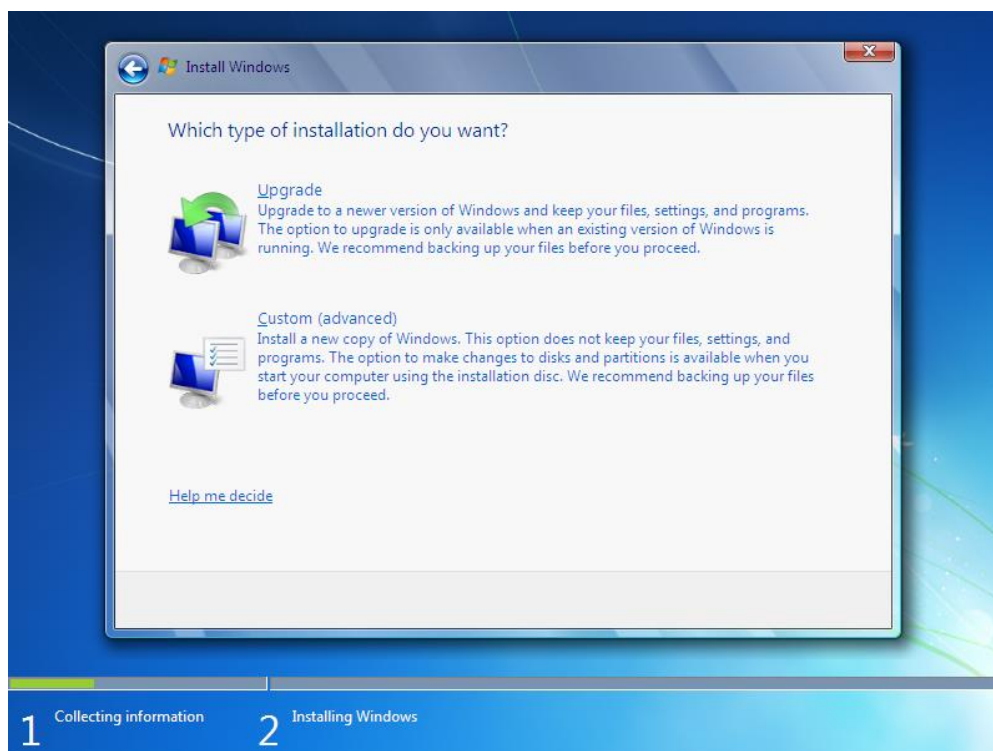
Step 03:Click Install now.



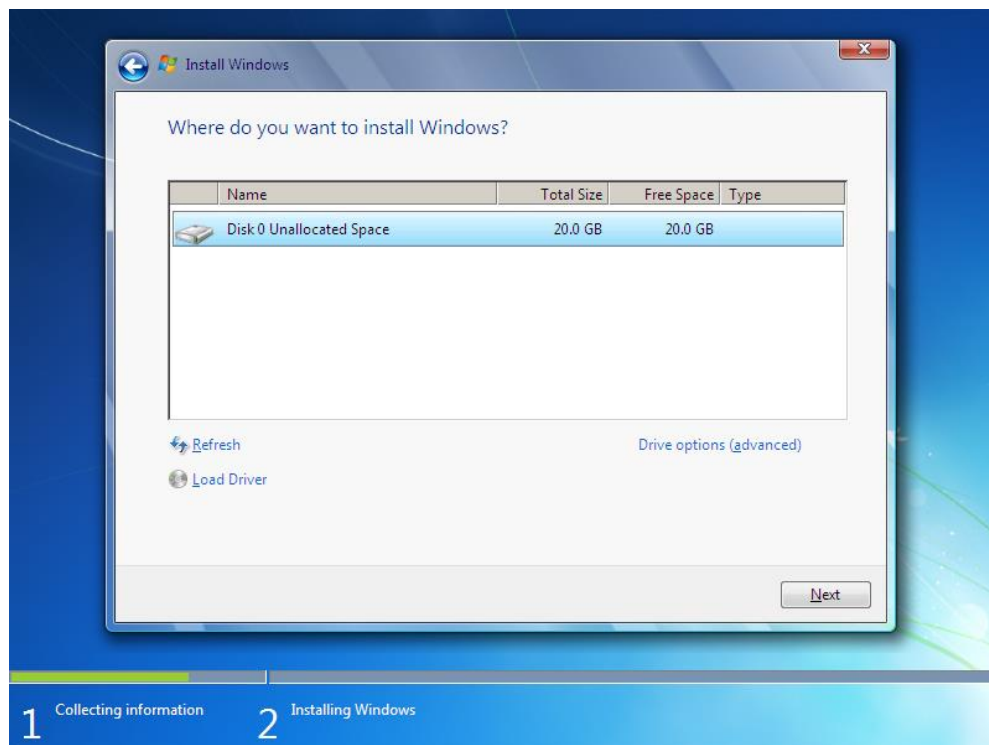
Step 04: Check I accept the license terms and click Next.



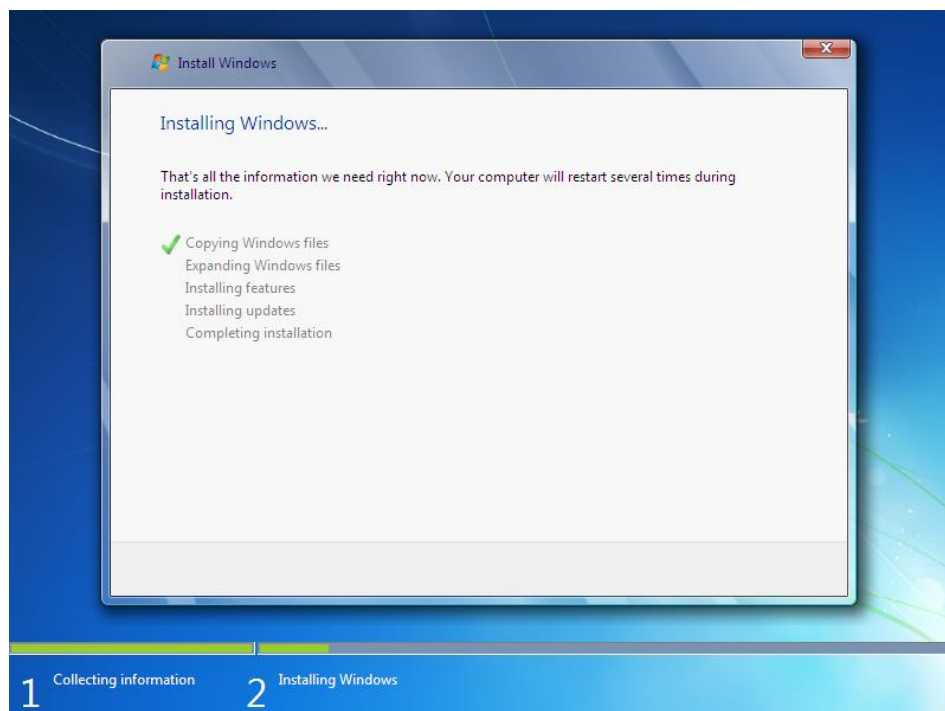
Step 05: Click Upgrade if you already have a previous Windows version or Custom (advanced) if you don't have a previous Windows version or want to install a fresh copy of Windows 7.



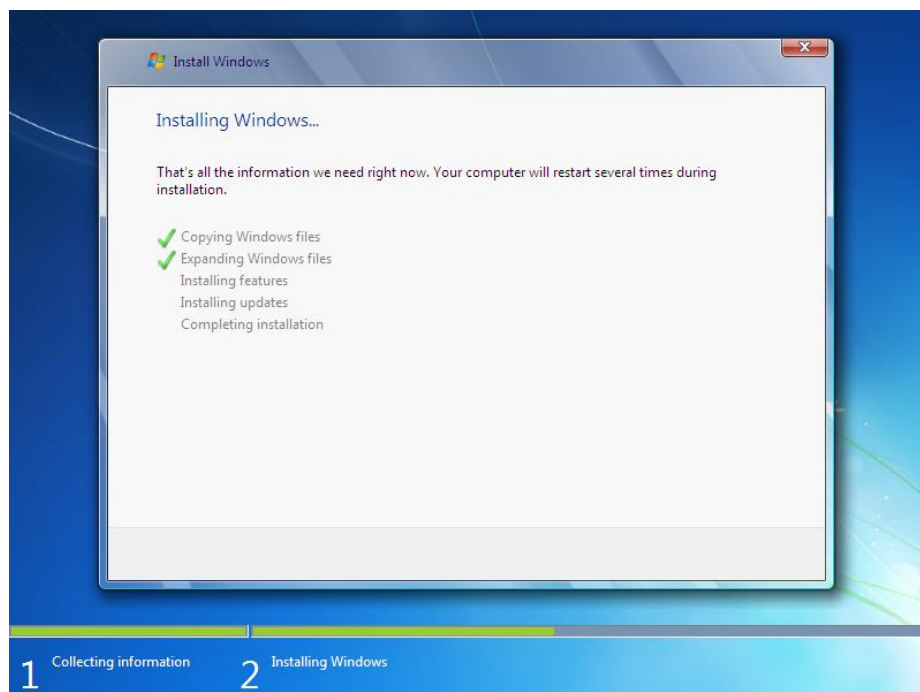
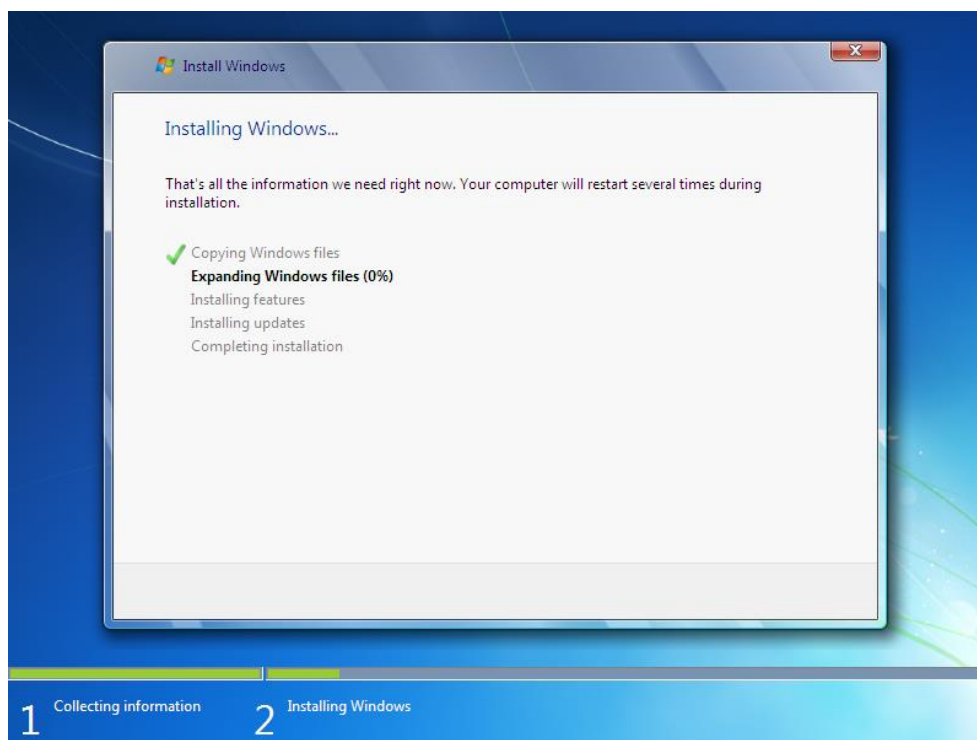
Step 06: Select the drive where you want to install Windows 7 and click Next. If you want to make any partitions, click Drive options (advanced), make the partitions and then click Next.



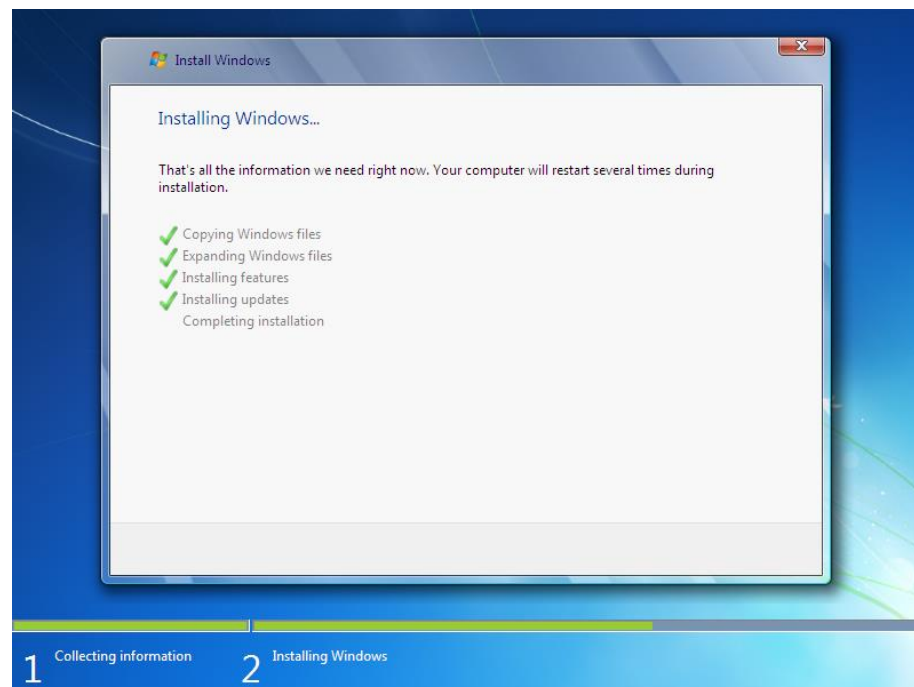
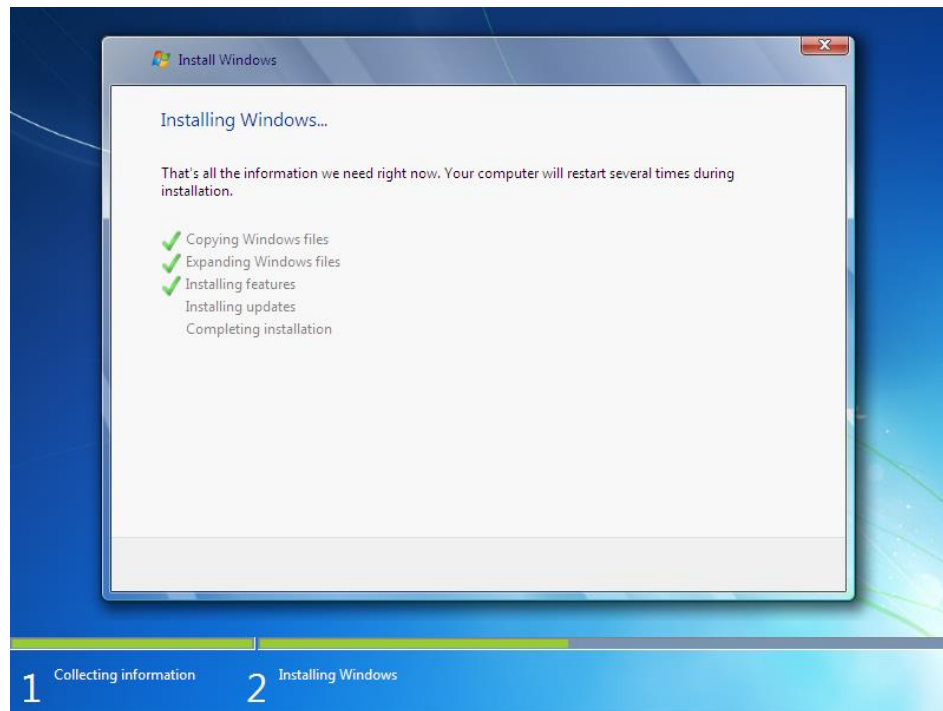
Step 07: It will now start installing Windows 7. The first step, (i.e. Copying Windows files) was already done when you booted the Windows 7 DVD so it will complete instantly.



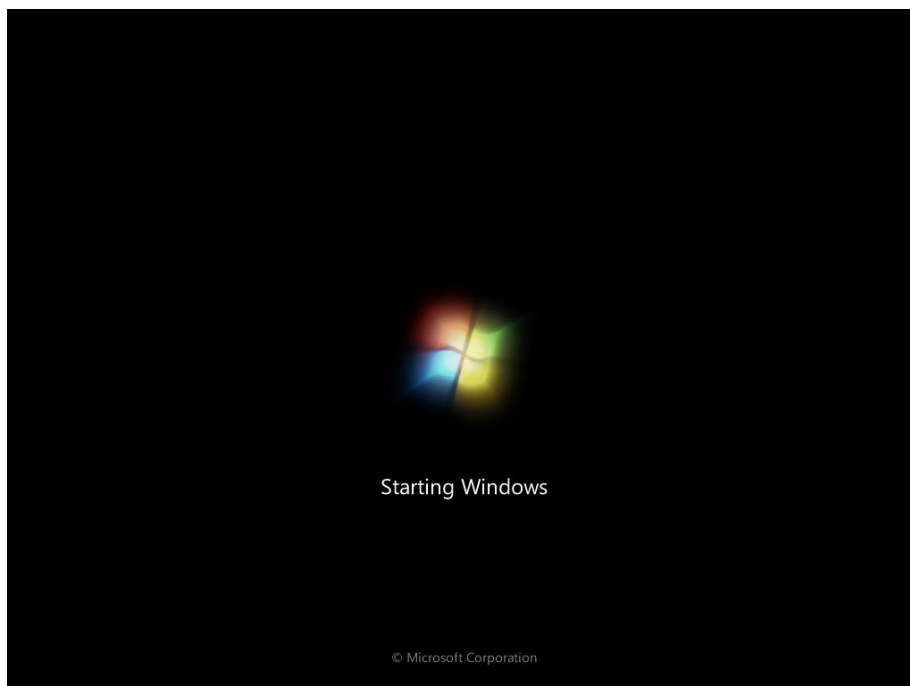
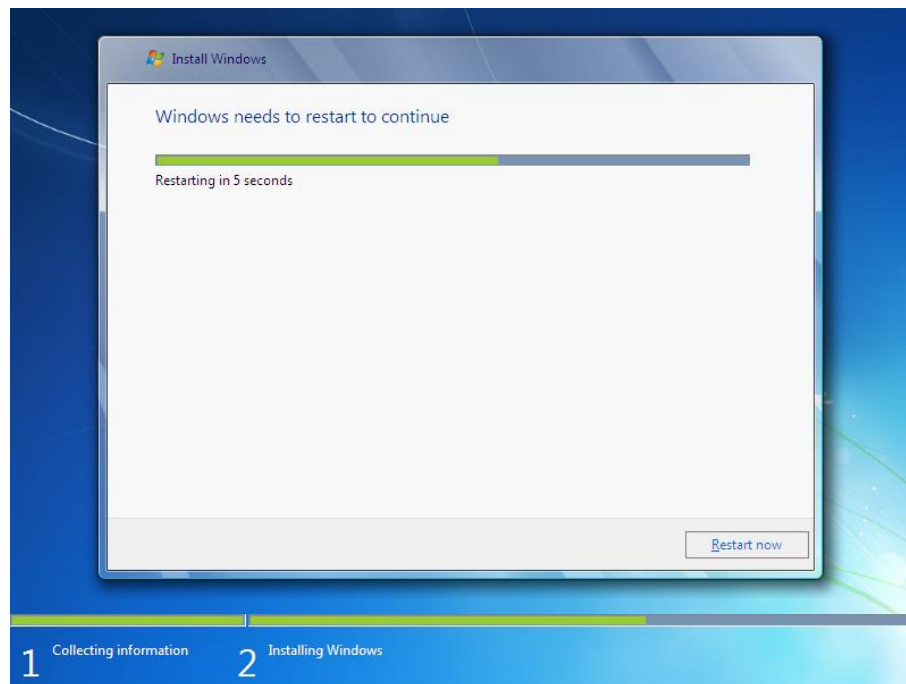
Step 08: After completing the first step, it will expand (decompress) the files that it had copied.

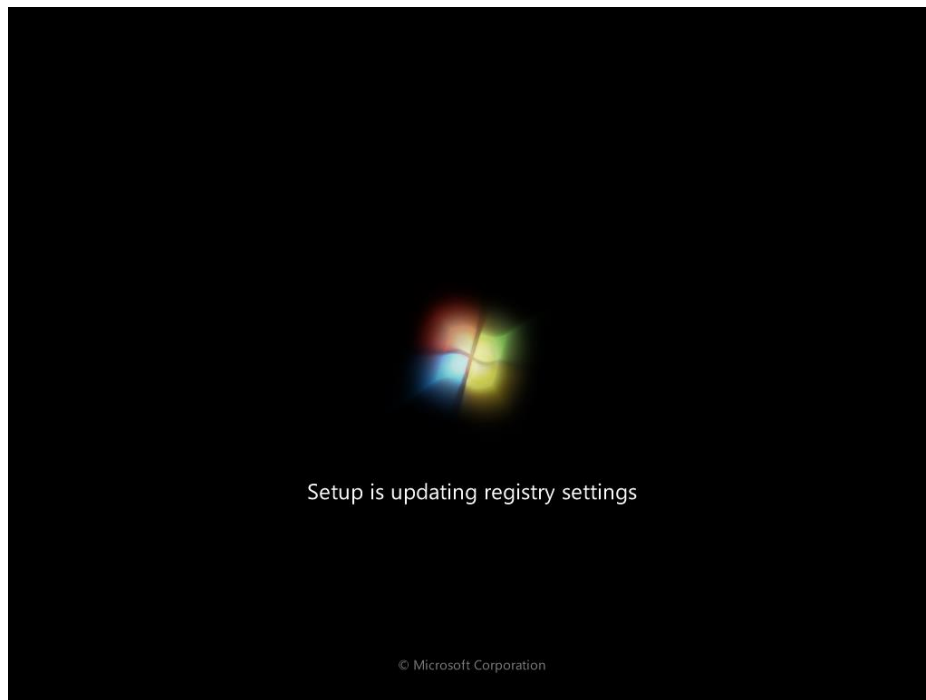


Step 09: The third and fourth step will also complete instantly like the first step.

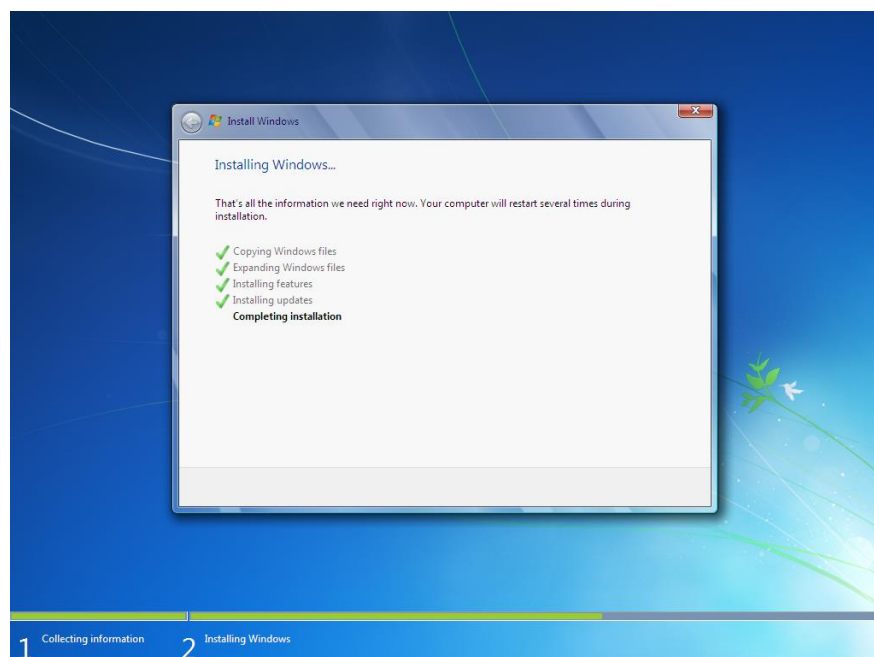


Step 10:After that it will automatically restart after 15 seconds and continue the setup. You can also click Restart now to restart without any delays.

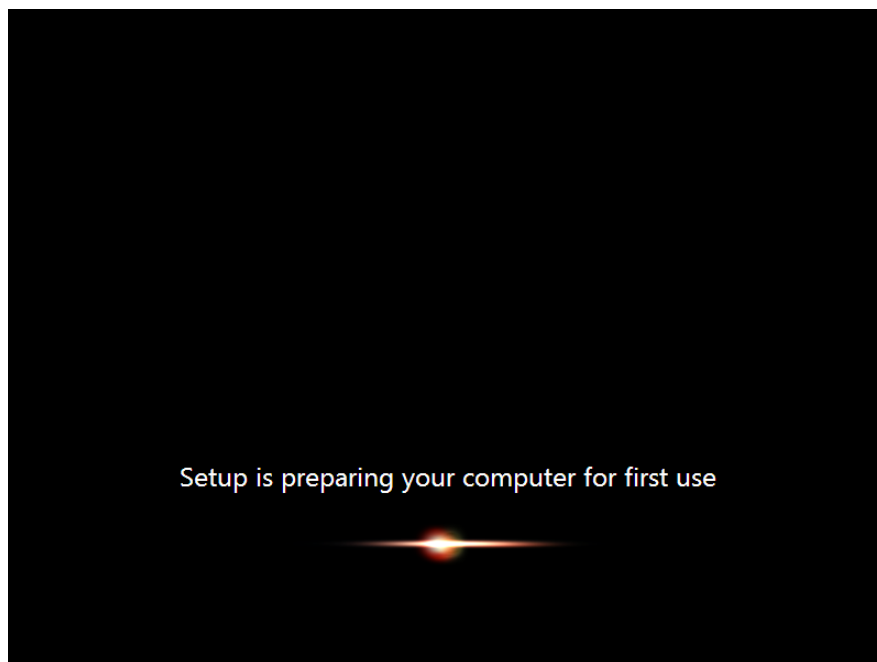
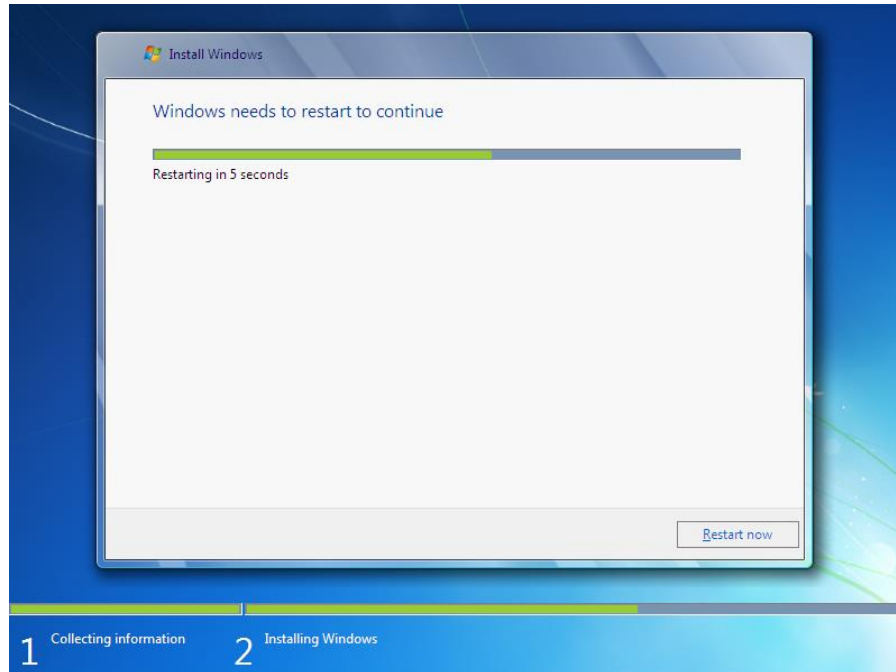




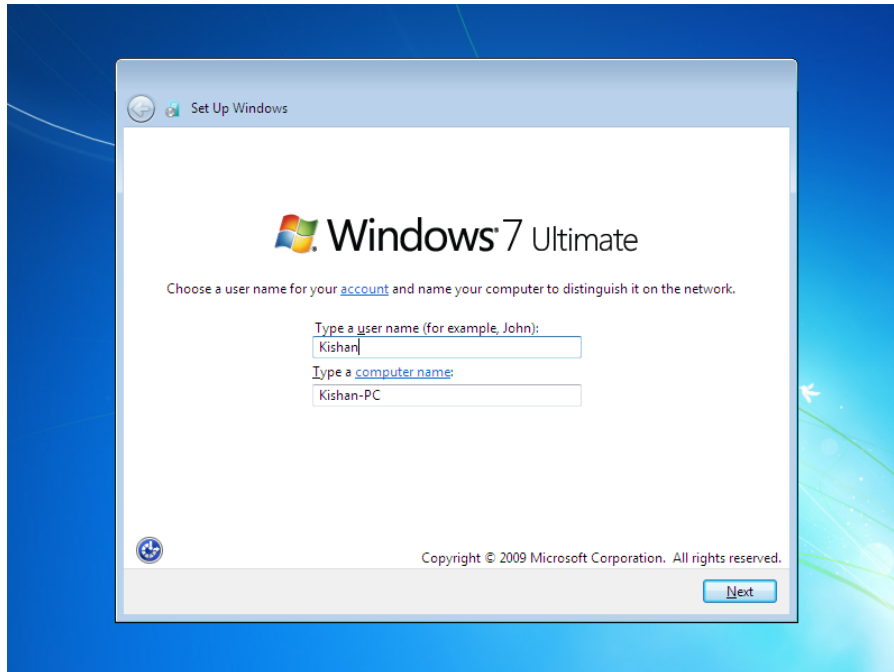
Step 11:After restarting for the first time, it will continue the setup. This is the last step so it will take the most time than the previous steps.



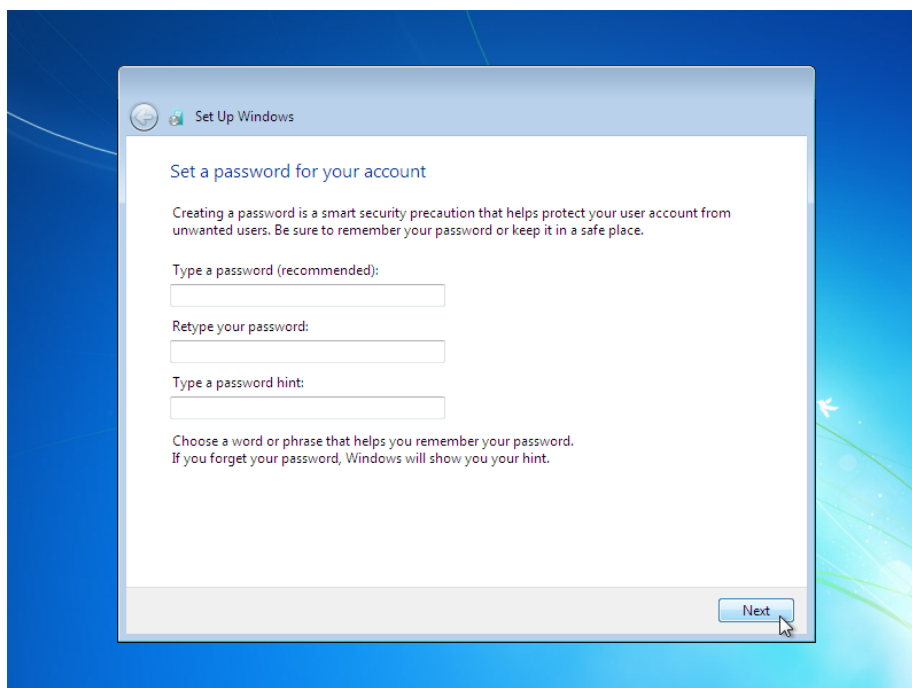
Step 12: It will now automatically restart again and continue the setup. You can click Restart now to restart without any delays.



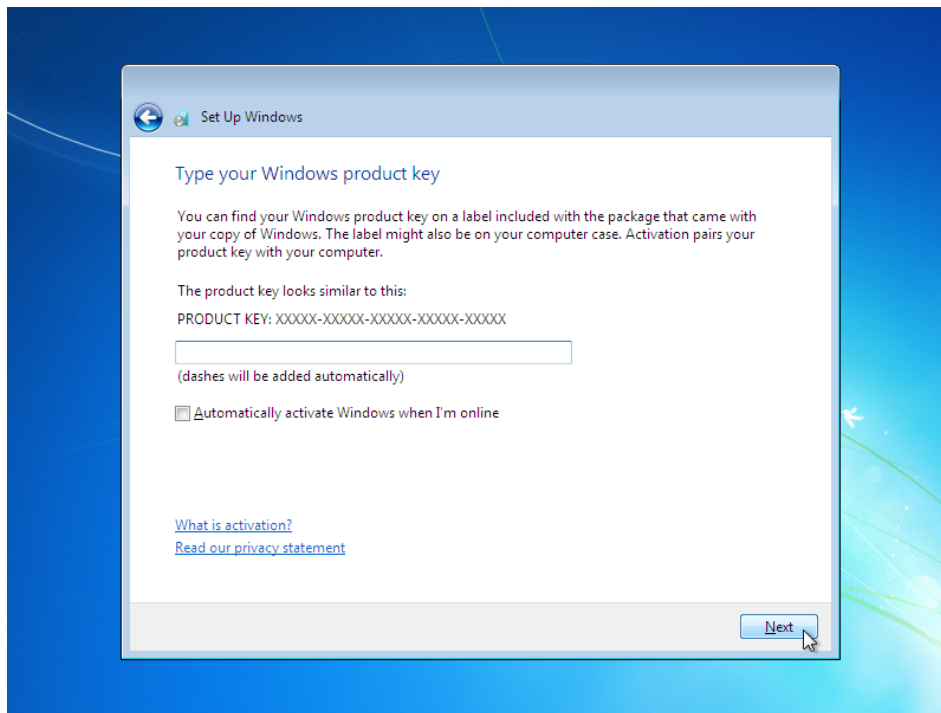
Step 13:Type your desired user name in the text-box and click Next. It will automatically fill up the computer name.



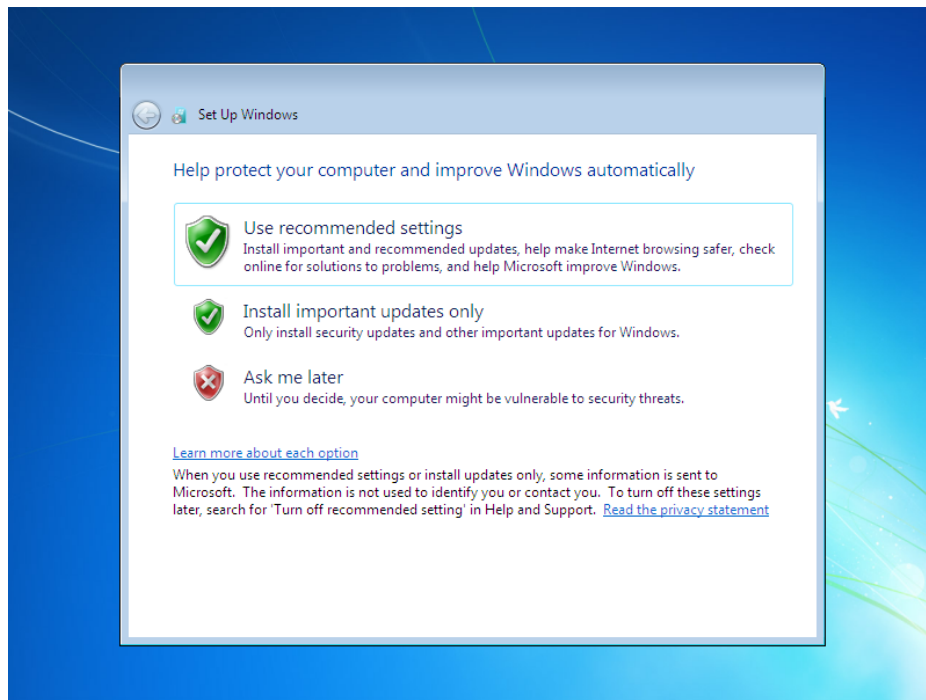
Step 14:If you want to set a password, type it in the text-boxes and click Next.



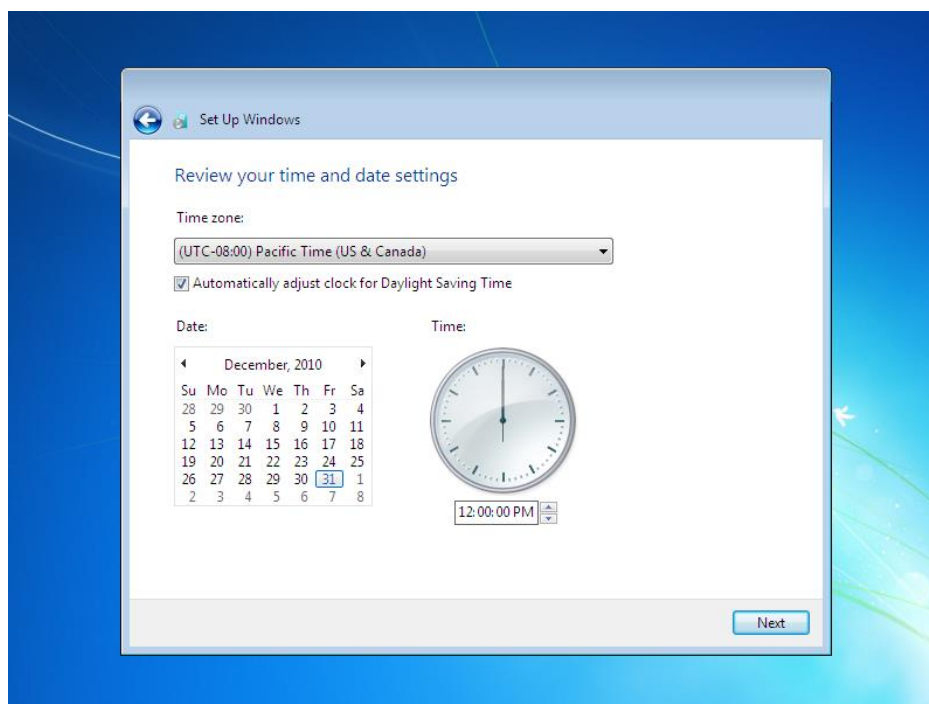
Step 15:Type your product key in the text-box and click Next. You can also skip this step and simply click Next if you want to type the product key later. Windows will run only for 30 days if you do that.



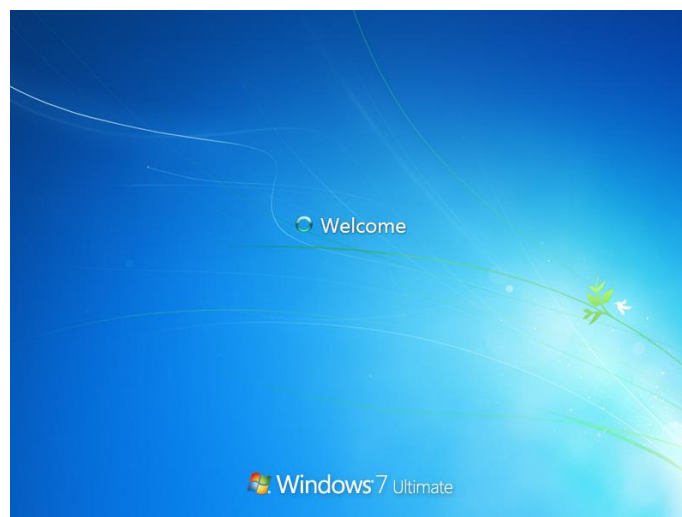
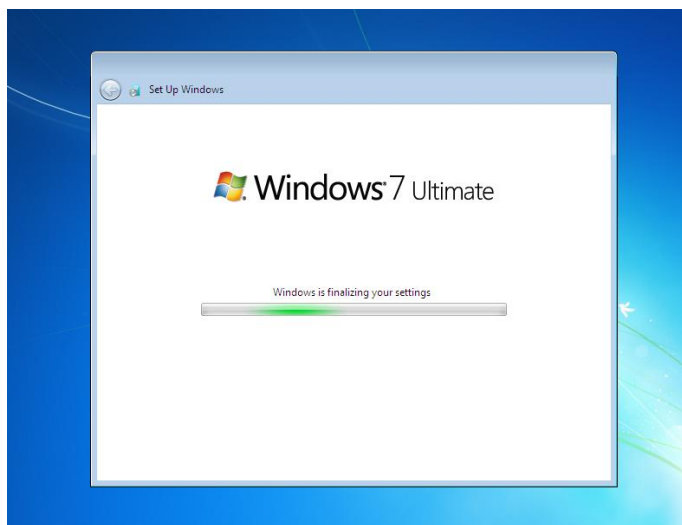
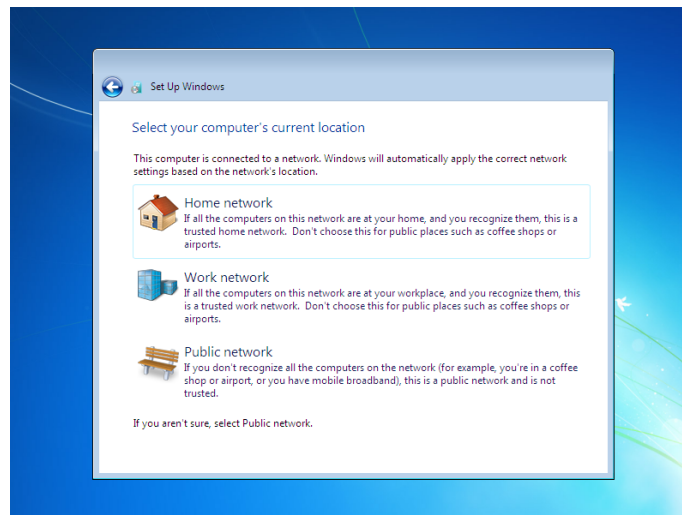
Step 16:Select your desired option for Windows Updates.



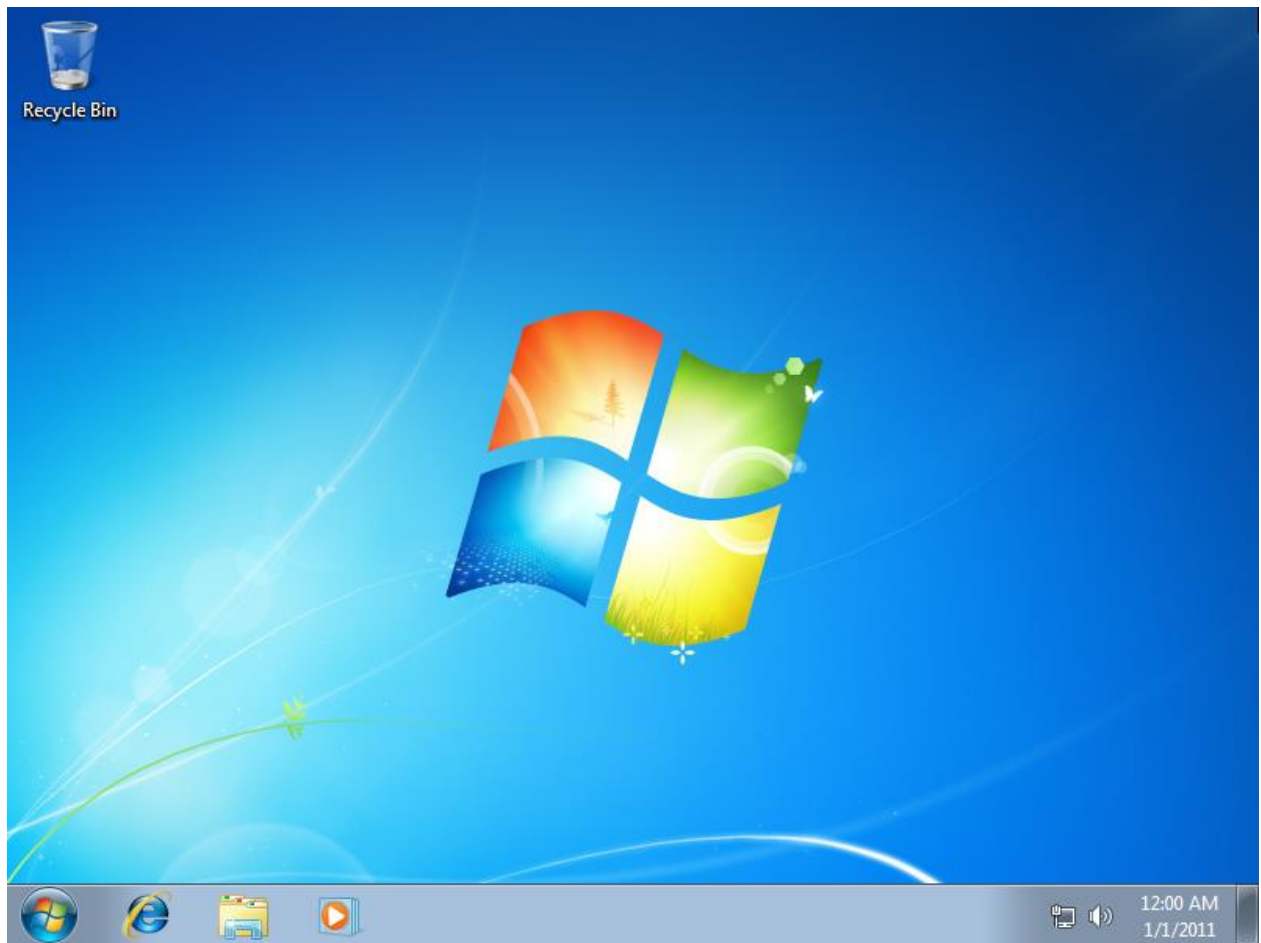
Step 17: Select your time and click Next.



Step 18: If you are connected to any network, it will ask you to set the network's location.



Step 19:And there you have a fresh copy of Windows 7 installed!



EXERCISE

- 1. Create a bootable Windows 7 USB. Note: use any tool other than PowerISO.**
 - a. Describe the entire procedure step by step.**
 - b. With every step, capture and place in the screenshots.**

- 2. Download windows 8 ISO image and install it through bootable USB:**
 - a. Describe the entire procedure step by step.**
 - b. With every step, capture and place in the screenshots.**