

# Object Oriented Programming with JAVA

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## LIST OF PRACTICALS

1. Installation of JDK
2. Installation of NetBean and Eclipse
3. Setup environment variable and Classpath
4. Program to Check Student is Pass or Fail
5. PIN Code Verification
6. Printing of Weekdays based on switch-case
7. Check whether a Character is 'Alphabet', 'Digit' or a 'Special Character'
8. Find the largest value in an Array
9. Printing series of natural numbers, even and odd numbers (GUI)
10. Check for Prime Number
11. A number guessing game
12. Basic Calculator
13. Changing Text Case from lower to upper and upper to lower
14. Reverse of a String
15. Creating a Java Class for Student Records to demonstrate classes, objects and Inheritance

## Installation of JDK

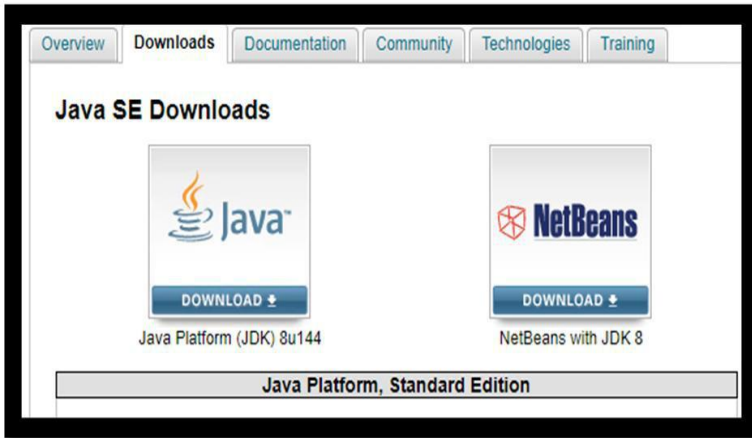
Un-Install Older Version(s) of JDK/JRE

If you have previously installed older version(s) of JDK/JRE, un-install ALL of them. Goto

⇒ "Control Panel" ⇒ "Programs" ⇒ "Programs and Features"

⇒ Un-install ALL programs begin with "Java", such as "Java SE Development Kit ...", "Java SE Runtime ...", "Java X Update ...", and etc.

### Step 1: Download JDK



🔗 Goto Java SE download site  
<http://www.oracle.com/technetwork/java/javase/downloads/index.html>.

- Under "Java Platform, Standard Edition" ⇒ "Java SE 8u{xx}", where {xx} is the latest update number ⇒ Click the "JDK Download" button.
- Look for the latest "Java SE Development Kit 8u{xx}" ⇒ Check "Accept License Agreement".
- Choose the JDK for your operating system, e.g., "Windows x64" (for 64-bit Windows OS) or "Windows x86" (for 32-bit Windows OS). You can check whether your Windows OS is 32-bit or

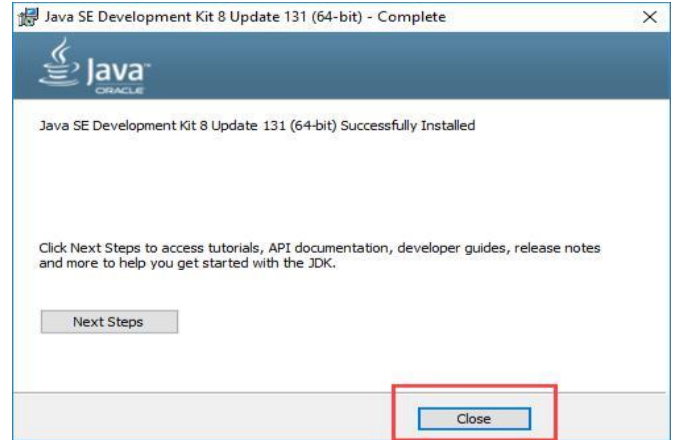
64-bit via "Control Panel" ⇒ (Optional)

System and Security

⇒ System

⇒ Under "System Type"

**Step 2)** Once the download is complete, run the .exe for install JDK. Click Next



**Step 4)** Once installation is complete click Close

## 2. Installation of NetBeans

### Step 0: Install JDK

To use NetBeans for Java programming, you need to first install Java Development Kit (JDK). See "JDK - How to Install".

### Step 1: Download

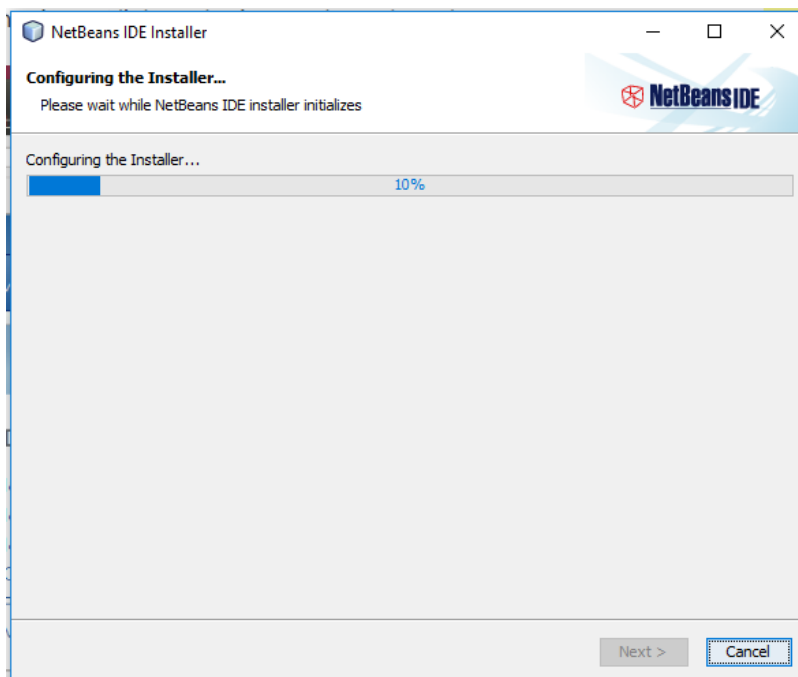
Download "NetBeans IDE" installer from

<http://netbeans.org/downloads/index.html>

There are many "bundles" available. For beginners, choose the 1st entry "Java SE" (e.g., "netbeans-8.2-javase-windows.exe" 95MB).

### Step 2: Run the Installer

Run the downloaded installer.



Tribute to my teachers:  
Your dedication and guidance gave me the wings by which I fly.

# 3. Setup environment variable and Class path

Step 1: Right Click on My Computer and click on properties.

Step 2: Click on Advanced tab

Step 3: Click on Environment Variables

Step 4: Create a new class path for JAVA\_HOME

Step 5: Enter the Variable name as JAVA\_HOME and the value to

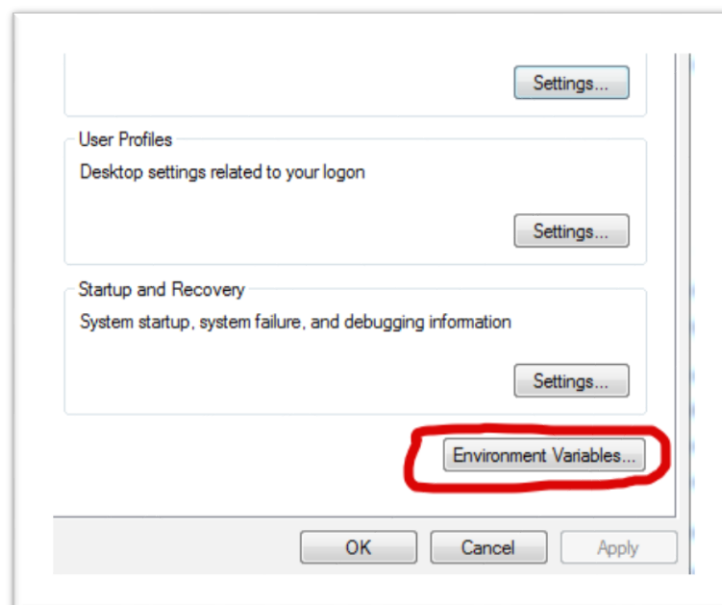
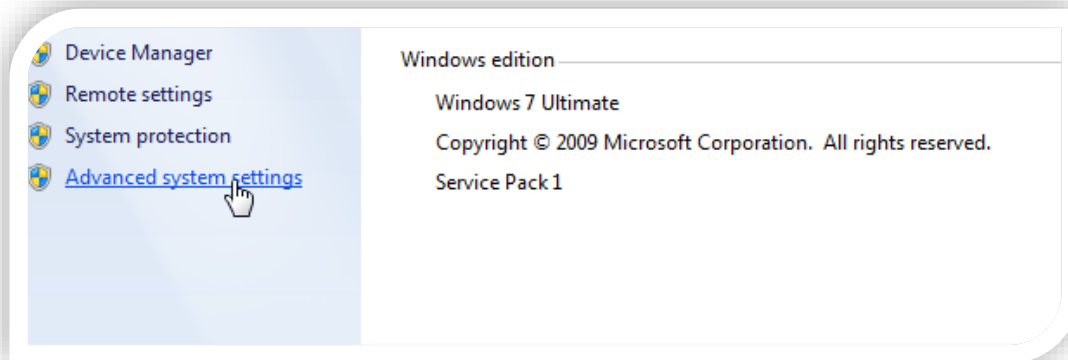
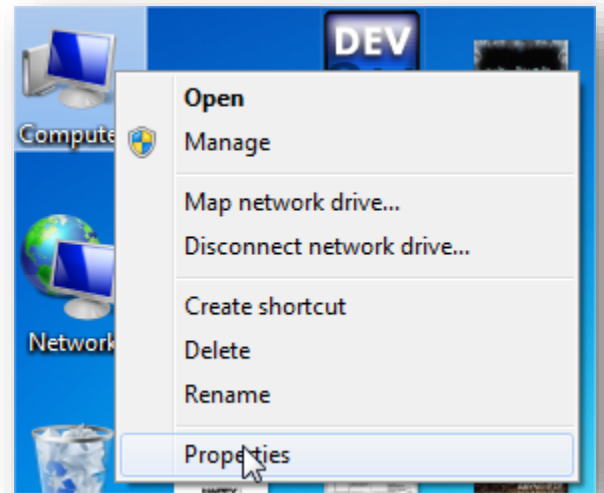
your jdk bin path ie ;c:\Programfiles\Java\jdk-1.6\bin and Step 6: Follow the Above step and edit the Path in System Variables

add the following;

;c:\Programfiles\Java\jdk1.6\bin:\Programfiles\Java\jdk-1.6\bin

in the value column.

Step 7: You are done setting up your environment variables for your java



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# 4. Program to Check Student is Pass or Fail

Write a program that will take “marks” as input and tell that student is pass or fail.  
Passing marks=40 , total marks =100

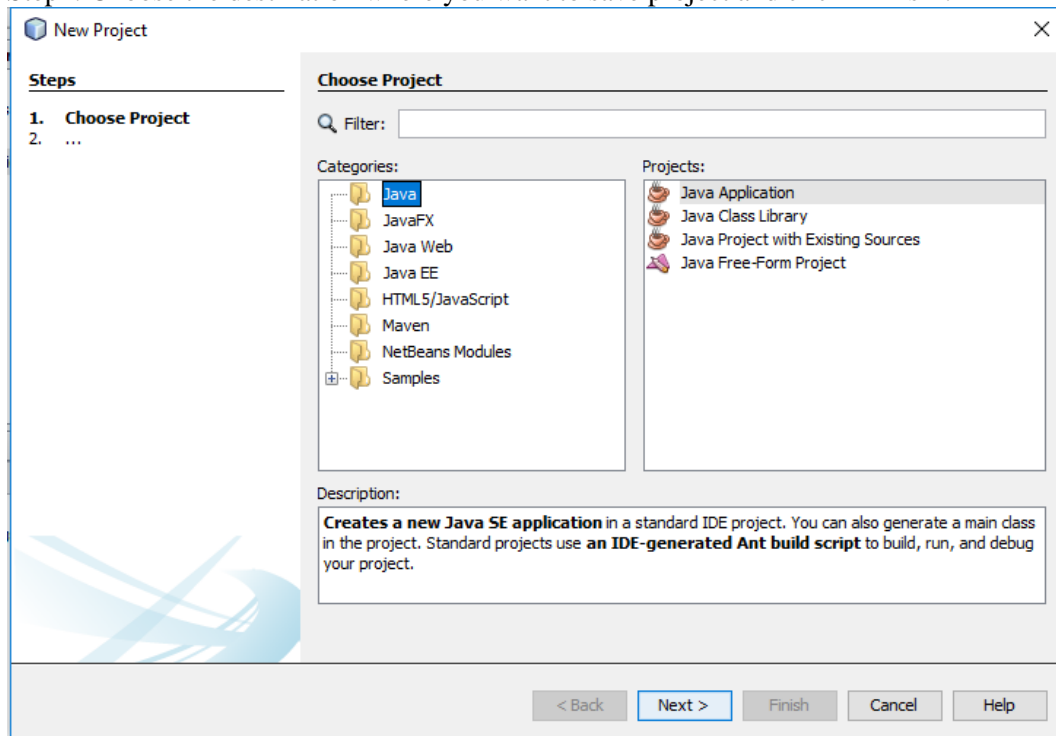
Code:

Step 1: Open your NetBeans I.D.E

Step2: Select “java” from categories and “java applications” from projects then click next

Step3: Then Select the file name “PassFail”

Step4: Choose the destination where you want to save project and click ‘Finish’.

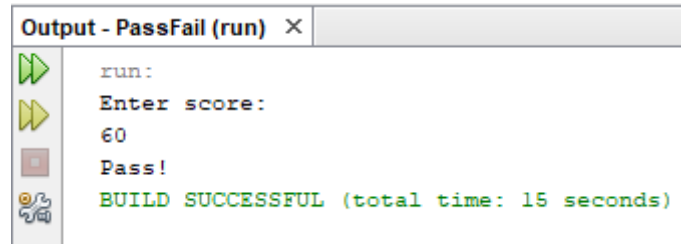


Step5: Then write the following code in Code Window

```
package passfail;
import java.util.Scanner;

public class PassFail {

    public static void main(String[] args) {
        int num;
        Scanner reader = new Scanner(System.in);
        System.out.println("Enter score: ");
        num = reader.nextInt();
        //passing marks are 40
        if (num >= 40)
        {
            System.out.println("Pass!");
        }
        else
            System.out.println("Fail!");
        }
    }
}
```



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