SE101.3 - Programming in JAVA
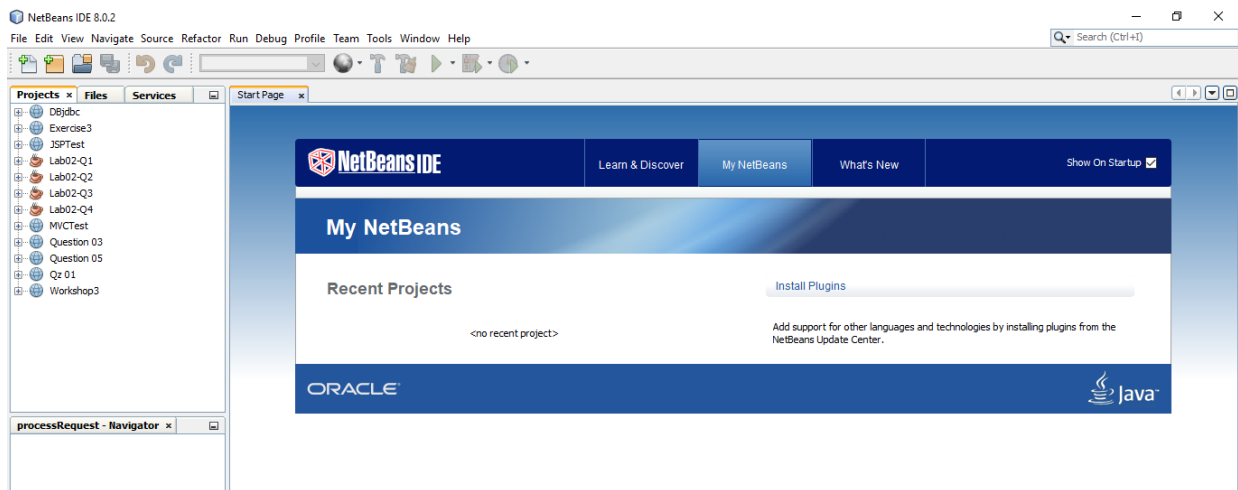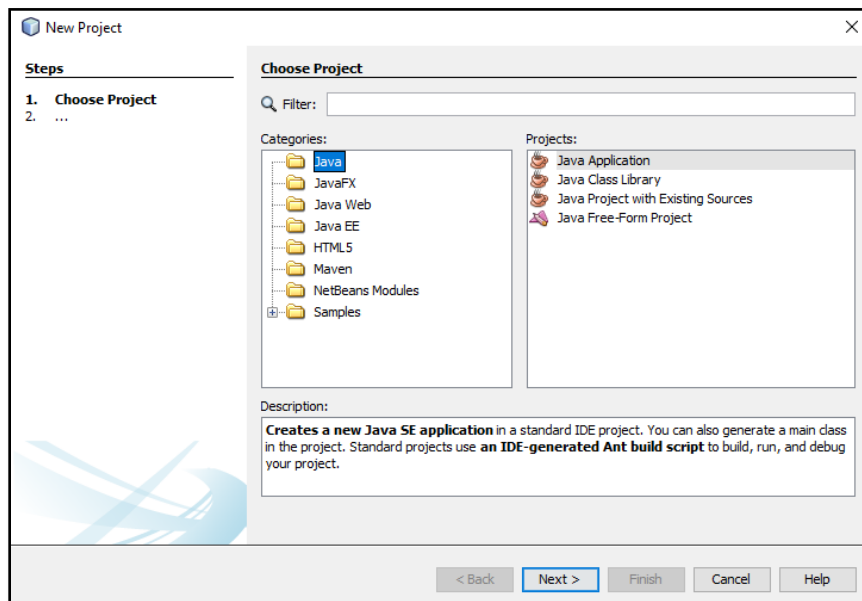
Lab Sheet 01

➤ **Execution of Java Source Code**

- The Java Compiler, **javac** translates the Java Source Code (**.java**) into Byte Code (**.class**).
- Java Interpreter executes Java Byte Code and gives the final output.
- Any computer with a Java interpreter can be considered an implementation of a Java virtual machine (JVM).
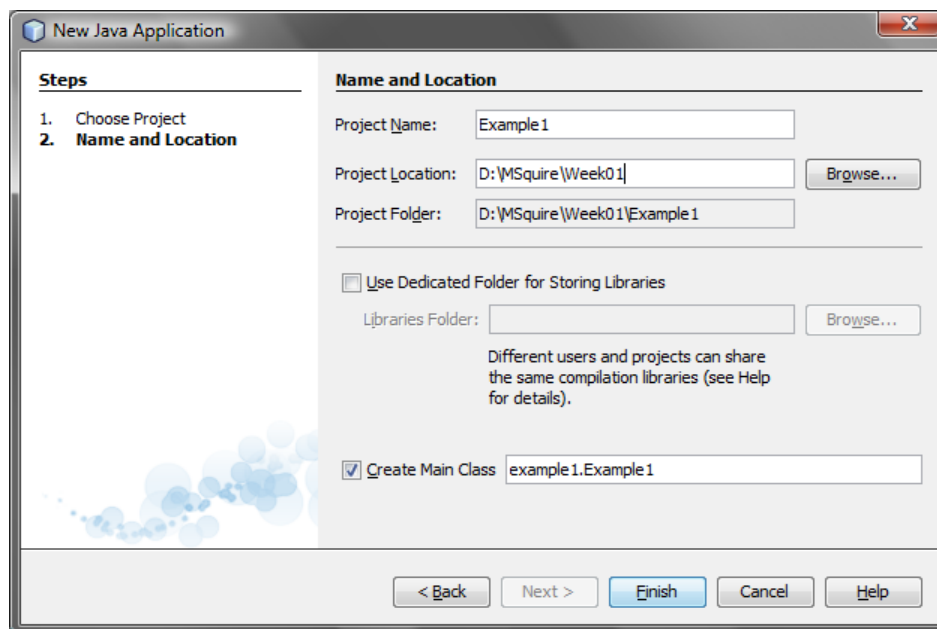
➤ **Using NetBeans as IDE**

- Download and install the latest NetBeans IDE in your machine.
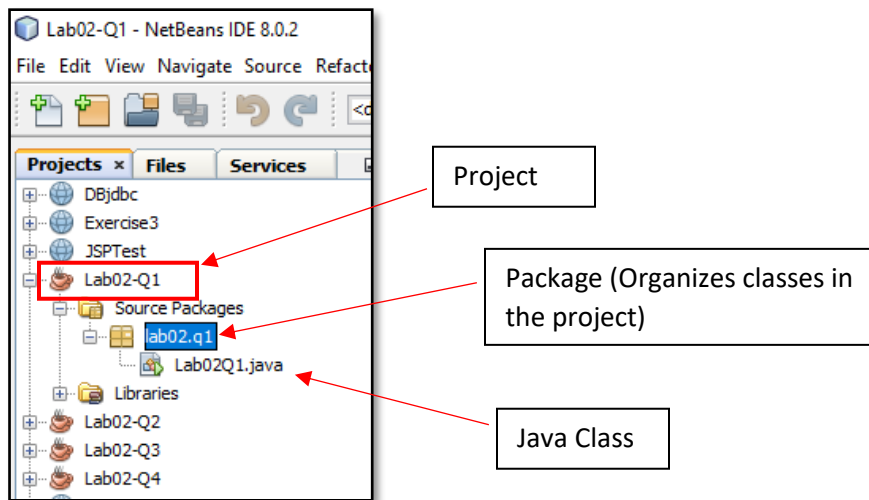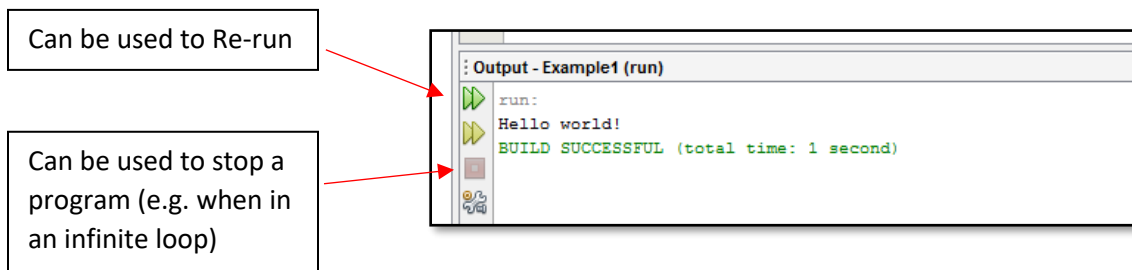- Open NetBeans IDE.

- **File → New Project**

- **Java → Java Application**

- Create a project with the name, **"Practical01"** and save the project in the Desktop. (Desktop\Java Practical).
- Add the main Class to the project.
- Then click Finish.

- The program will run and will display the results in the output window at the bottom.

Can be used to Re-run

Can be used to stop a program (e.g. when in an infinite loop)

> **Let's Try Coding with NetBeans…**

Question 01:

Write your first java Programme to display "Hello World" on the screen.

Question 02:

Write a Programme to display your name on the first line and to display your degree Programme on the second line on the screen.

Question 03:

Write a class and insert the following code block into the appropriate place. Execute the code and get the result.

```
int [] numbers = {10, 20, 30, 40, 50};
for(int x : numbers ){
   if( x == 30 ){
     break;
   }
   System.out.print( x );
   System.out.print("\n");
}
System.out.print("I'm  out of the Loop now");
```

Question 04:

Repeat the same code using "continue" instead of "break". Write down the output.

Question 05:

Write a class and insert the following code block into the appropriate place. Execute the code and get the result.

```
1.  char grade ='A';
2.   switch(grade)
3.  {
4.  case 'A' :
5.  System.out.println("Excellent!");
6.  break;
7.  case 'D' :
8.  System.out.println("You passed");
9.  case 'F' :
10. System.out.println("Better try again");
11. break;
12. default :
13. System.out.println("Invalid grade");
14. }
```

W.A. Nethmi T Weerasingha

15. System.out.println("Your grade is " + grade);

Question 06:

Repeat the same removing "break" statement at line number 6. Write down the output.

Repeat the same scenario by using if-else-if statement instead of switch case.

******End of the Practical******

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