



Bangladesh University Of Business and Technology (BUBT)

**Advanced Programming Lab
Course code: CSE 332
Lab Assignment 1**

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1. Write a java program to reverse a value without using array using Scanner method.

Code:

```
import java.util.Scanner;

public class ReverseNumber {

    public static void main(String[] args) {

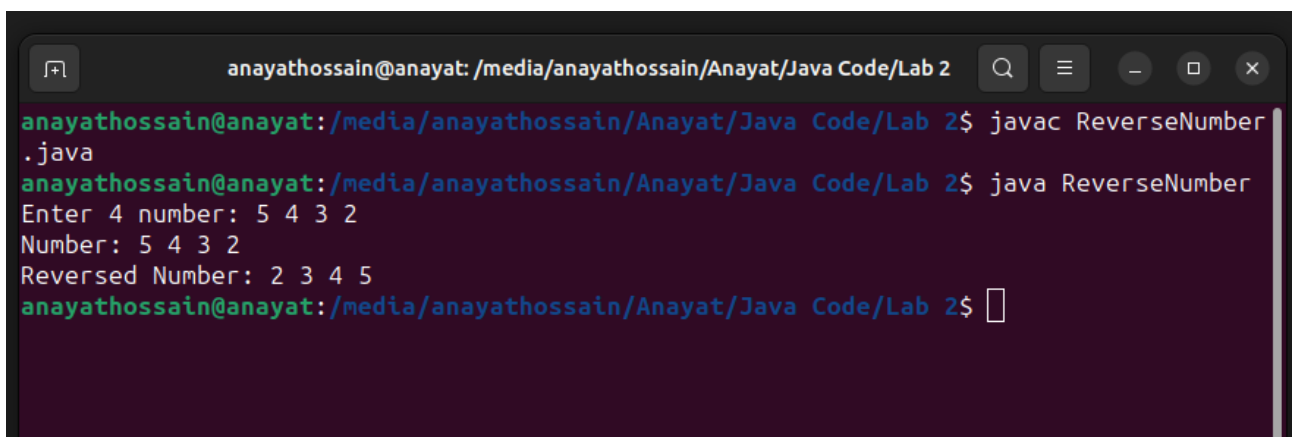
        Scanner inp = new Scanner(System.in);

        System.out.print("Enter 4 number: ");
        int number1 = inp.nextInt();
        int number2 = inp.nextInt();
        int number3 = inp.nextInt();
        int number4 = inp.nextInt();

        System.out.println("Number: " + number1 + " " + number2 + " " + number3 + " " + number4);

        System.out.println("Reversed Number: " + number4 + " " + number3 + " " + number2 + " " + number1);
    }
}
```

Output:

A screenshot of a terminal window with a dark background. The window title is "anayathossain@anayat: /media/anayathossain/Anayat/Java Code/Lab 2". The terminal shows the following commands and output:
anayathossain@anayat:/media/anayathossain/Anayat/Java Code/Lab 2\$ javac ReverseNumber.java
anayathossain@anayat:/media/anayathossain/Anayat/Java Code/Lab 2\$ java ReverseNumber
Enter 4 number: 5 4 3 2
Number: 5 4 3 2
Reversed Number: 2 3 4 5
anayathossain@anayat:/media/anayathossain/Anayat/Java Code/Lab 2\$
The terminal has standard window controls (search, menu, zoom, close) in the top right corner.

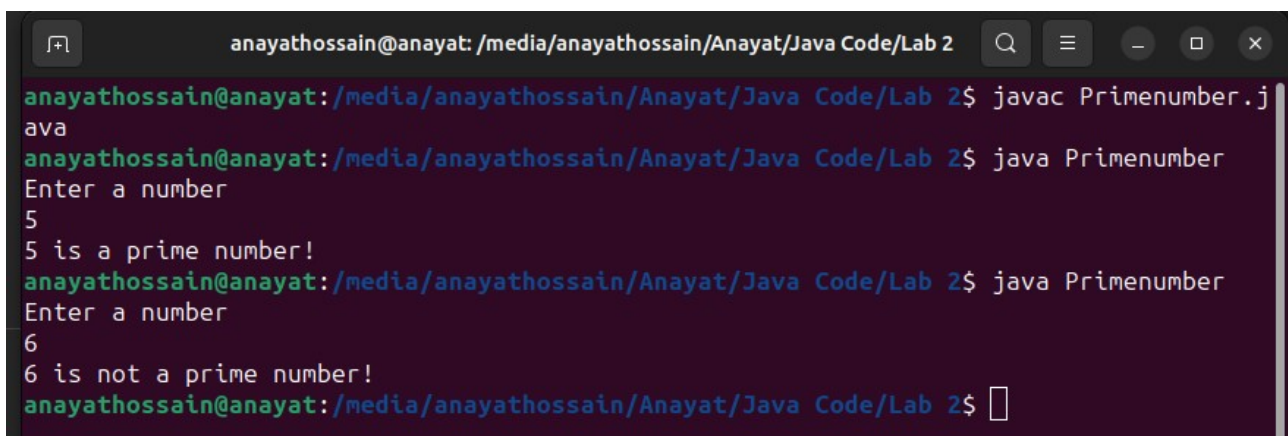
2. Write a java program to find a value prime or not using Scanner method.

Code:

```
import java.util.Scanner;

public class Primenumber {
    public static void main(String args[]) {
        Scanner ob = new Scanner(System.in);
        System.out.println("Enter a number");
        int n = ob.nextInt();
        int i, m = 0, flag = 0;
        // it is the number to be checked
        m = n / 2;
        if (n == 0 || n == 1) {
            System.out.println(n + " is not a prime number!");
        } else {
            for (i = 2; i <= m; i++) {
                if (n % i == 0) {
                    System.out.println(n + " is not a prime number!");
                    flag = 1;
                    break;
                }
            }
            if (flag == 0) {
                System.out.println(n + " is a prime number!");
            }
        }
    }
}
```

Output:

A terminal window with a dark background and light-colored text. The window title is 'anayathossain@anayat: /media/anayathossain/Anayat/Java Code/Lab 2'. The terminal shows the compilation and execution of a Java program. The user enters '5' and the output is '5 is a prime number!'. Then the user enters '6' and the output is '6 is not a prime number!'. The prompt is currently empty.

```
anayathossain@anayat: /media/anayathossain/Anayat/Java Code/Lab 2$ javac Primenumber.java
anayathossain@anayat: /media/anayathossain/Anayat/Java Code/Lab 2$ java Primenumber
Enter a number
5
5 is a prime number!
anayathossain@anayat: /media/anayathossain/Anayat/Java Code/Lab 2$ java Primenumber
Enter a number
6
6 is not a prime number!
anayathossain@anayat: /media/anayathossain/Anayat/Java Code/Lab 2$
```

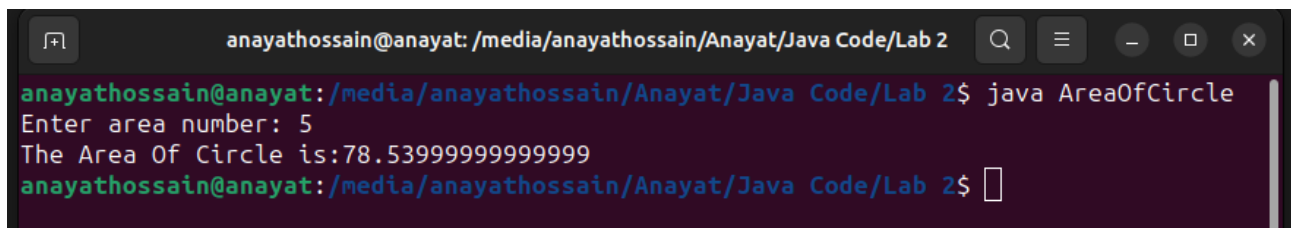
3. Write a Java program to find the area of a circle using Scanner method.

Code:

```
import java.util.Scanner;

class AreaOfCircle{
public static void main(String [] args)
{
Scanner inp = new Scanner(System.in);
System.out.print("Enter area number: ");
double r = inp.nextDouble();
double a= 3.1416*(r*r);
System.out.println("The Area Of Circle is:"+a);
}
}
```

Output:

A screenshot of a terminal window with a dark background. The title bar at the top reads 'anayathossain@anayat: /media/anayathossain/Anayat/Java Code/Lab 2'. The terminal shows the command 'java AreaOfCircle' being executed. The output is 'Enter area number: 5' followed by 'The Area Of Circle is:78.53999999999999'. The prompt 'anayathossain@anayat: /media/anayathossain/Anayat/Java Code/Lab 2\$' is visible at the bottom.

```
anayathossain@anayat: /media/anayathossain/Anayat/Java Code/Lab 2$ java AreaOfCircle
Enter area number: 5
The Area Of Circle is:78.53999999999999
anayathossain@anayat: /media/anayathossain/Anayat/Java Code/Lab 2$
```

4. Write a Java program to find a letter Vowel or Consonant using Scanner method.

Code:

```
import java.util.Scanner;
public class VowelConsonant {

public static void main(String [] args){
Scanner inp = new Scanner(System.in);
System.out.print("Enter a String: ");
// String r = inp.nextLine();
char ch = inp.next().charAt(0);

if(ch == 'a' || ch == 'e' || ch == 'i' || ch == 'o' || ch == 'u' || ch == 'A' || ch == 'E' || ch == 'I' || ch == 'O' ||
ch == 'U' )
System.out.println(ch + " is vowel");
else
System.out.println(ch + " is consonant");
} }
```

Output:

```
anayathossain@anayat: /media/anayathossain/Anayat/Java Code/Lab 2
anayathossain@anayat: /media/anayathossain/Anayat/Java Code/Lab 2$ javac VowelConsonant.java
anayathossain@anayat: /media/anayathossain/Anayat/Java Code/Lab 2$ java VowelConsonant
Enter a String: A
A is vowel
anayathossain@anayat: /media/anayathossain/Anayat/Java Code/Lab 2$ java VowelConsonant
Enter a String: H
H is consonant
anayathossain@anayat: /media/anayathossain/Anayat/Java Code/Lab 2$
```

5. Write a Java program to find the addition of two number using JOptionPane class.

Code:

```
import javax.swing.JOptionPane;
```

```
public class AdditionWithJOptionPane {
    public static void main(String[] args) {
```

```
        String input1 = JOptionPane.showInputDialog("Enter the first number:");
        double number1 = Double.parseDouble(input1);
```

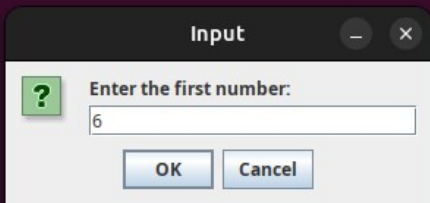
```
        String input2 = JOptionPane.showInputDialog("Enter the second number:");
        double number2 = Double.parseDouble(input2);
```

```
        double sum = number1 + number2;
```

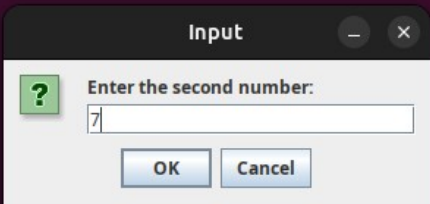
```
        JOptionPane.showMessageDialog(null, "The sum is: " + sum, "Result",
        JOptionPane.INFORMATION_MESSAGE);
    }
}
```

Outputs:

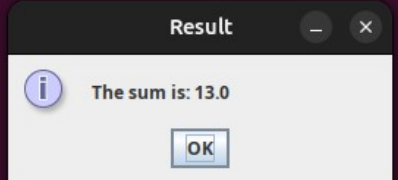
```
anayathossain@anayat: /media/anayathossain/Anayat/Java Code/Lab 2
anayathossain@anayat: /media/anayathossain/Anayat/Java Code/Lab 2$ javac AdditionWithJOptionPane.java
anayathossain@anayat: /media/anayathossain/Anayat/Java Code/Lab 2$ java AdditionWithJOptionPane
```



```
anayathossain@anayat: /media/anayathossain/Anayat/Java Code/Lab 2$ javac AdditionWithJOptionPane.java
anayathossain@anayat: /media/anayathossain/Anayat/Java Code/Lab 2$ java AdditionWithJOptionPane
```

An input dialog box titled "Input" with a green question mark icon. It contains the text "Enter the second number:" and a text field with the value "7". There are "OK" and "Cancel" buttons at the bottom.

```
anayathossain@anayat: /media/anayathossain/Anayat/Java Code/Lab 2$ javac AdditionWithJOptionPane.java
anayathossain@anayat: /media/anayathossain/Anayat/Java Code/Lab 2$ java AdditionWithJOptionPane
```

A result dialog box titled "Result" with a blue information icon. It contains the text "The sum is: 13.0" and an "OK" button at the bottom.