

# **Assignment – Basics of Java Programming**

Object Orientated Programming through Java –  
CSE2016

**Submitted by:**

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## Program 1. Wap to print full pyramind of vowels.

Program:

```
public class Pyramid
{
    public static void main(String[] args) {
        int n = 5;
        char arr[] = new char[]{'a','e','i','o','u'};

        for(int i=0;i< arr.length;i++)
        {
            for(int j=0;j<n;j++)
                System.out.print(" ");
            n--;

            for(int j=0;j<=i;j++)
                System.out.print(arr[j]+" ");
            System.out.println();
        }
    }
}
```

Output:

Try the new cross-platform PowerShell <https://aka.ms/pscore6>

PS C:\Prashant\Programming\Java\Java> javac Pyramid.java

PS C:\Prashant\Programming\Java\Java> java Pyramid

a

a e

a e i

a e i o

a e i o u

PS C:\Prashant\Programming\Java\Java> █

## Program 2. Wap to reverse a number.

Program:

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

    public static void main(String[] args) {
        Scanner scan=new Scanner(System.in);
        System.out.println("Enter the number to reverse");
        int num=scan.nextInt();
        int rev=0;
        while (num!=0)
        {
            rev= rev*10+num%10;
            num=num/10;
        }
        System.out.println(rev);
        scan.close();
    }
}
```

Output:

```
PS C:\Prashant\Programming\Java\Java> java Reversenumber
Enter the number to reverse
453
354
PS C:\Prashant\Programming\Java\Java> 
```

### Program 3. Wap to remove all whitespace from a string.

Program:

```
import java.util.Scanner;

public class Whitespace {

    public static void main(String[] args) {
        System.out.println("Enter the string to trim: ");
        Scanner scan= new Scanner(System.in);
        String value = scan.nextLine();

        String nospaces= value.replace(" ", "");
        System.out.println(nospaces);
        scan.close();
    }
}
```

Output:

```
Enter the string to trim:
```

```
How are you doing
```

```
Howareyoudoing
```

```
PS C:\Prashant\Programming\Java\Java> [
```

## Program 4. Wap to generate a random number in java.

Program:

```
public class Randomnum {  
  
    public static void main(String[] args) {  
  
        System.out.println(1 + (9-1)*Math.random());  
  
    }  
  
}
```

Output:

```
PS C:\Prashant\Programming\Java\Java> javac Randomnum.java  
PS C:\Prashant\Programming\Java\Java> java Randomnum  
4.473642567868284  
PS C:\Prashant\Programming\Java\Java> java Randomnum  
2.2464753315290107  
PS C:\Prashant\Programming\Java\Java> 
```

## Program 5. Wap to print ASCII value in java.

Program:

```
public class AsciiVal {  
  
    public static void main(String[] args) {  
        String name = "wassup";  
        System.out.println(name.codePointAt(0));  
        System.out.println(name.codePointAt(1));  
        System.out.println(name.codePointAt(2));  
        System.out.println(name.codePointAt(3));  
        System.out.println(name.codePointAt(4));  
        System.out.println(name.codePointAt(5));  
    }  
}
```

Output:

```
PS C:\Prashant\Programming\Java\Java> javac AsciiVal.java  
PS C:\Prashant\Programming\Java\Java> java AsciiVal  
119  
97  
115  
115  
117  
112  
PS C:\Prashant\Programming\Java\Java> █
```

## Program 6. Wap to calculate total number of vowels in a string.

Program:

```
import java.util.Scanner;

public class Totalvowels {
    public static void main(String[] args) {
        int count = 0;
        Scanner scan = new Scanner(System.in);
        String value = scan.nextLine();
        String str = value.toLowerCase();
        System.out.println(str);

        for(int i = 0; i < str.length(); ++i) {
            if (str.charAt(i) == 'a' || str.charAt(i) == 'e' || str.charAt(i) == 'i' || str.
charAt(i) == 'o' || str.charAt(i) == 'u') {
                ++count;
            }
        }
        System.out.println("The total number of vowels in given strings are: ");
    };
    System.out.println(count);
    scan.close();
}
}
```

Output:

```
PS C:\Prashant\Programming\Java\Java> java Totalvowels
My name is prashant
my name is prashant
The total number of vowels in given strings are:
5
PS C:\Prashant\Programming\Java\Java> |
```

## Program 7. Wap to swap 2 numbers without using 3<sup>rd</sup> variable.

Program:

```
import java.util.Scanner;

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

        Scanner scan = new Scanner(System.in);
        System.out.println("Enter two numbers: ");
        int a = scan.nextInt();
        int b = scan.nextInt();

        System.out.print(a+" ");
        System.out.println(b);
        a=a+b;
        b=a-b;
        a=a-b;
        System.out.print(a+" ");
        System.out.print(b);

        scan.close();
    }
}
```

Output:

```
PS C:\Prashant\Programming\Java\Java> javac Swapnum.java
PS C:\Prashant\Programming\Java\Java> java Swapnum
Enter two numbers:
34 56
34 56
56 34
PS C:\Prashant\Programming\Java\Java> 
```



## Program 8. Wap to check if a whether the integer list contain any odd number or not.

Program:

```
public class Oddint {  
  
    public static void main(String[] args) {  
        int ceven=0,codd=0;  
  
        int[] num = {3,6,9,12,14,16,17,19,21,22,24,25,27,30,35,26,74,56,  
76,100};  
  
        for(int i=0;i<num.length;i++)  
        {  
            if (num[i] % 2 == 0)  
            {  
                ceven++;  
            }  
        }  
        System.out.println(ceven);  
    }  
}
```

Output:

```
PS C:\Prashant\Programming\Java\Java> java Oddint  
12  
PS C:\Prashant\Programming\Java\Java> 
```

## Program 9. Wap to change the format of the date from DD/MM/YYYY to MM/DD/YYYY.

Program:

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

    public static void main(String[] args) {
        Scanner scan=new Scanner(System.in);
        String str = scan.nextLine();
        String temp=str;
        char arr[]=str.toCharArray();
        arr[0]=temp.charAt(3);
        arr[1]=temp.charAt(4);
        arr[3]=temp.charAt(0);
        arr[4]=temp.charAt(1);
        str=String.valueOf(arr);
        System.out.println(str);

        scan.close();
    }
}
```

Output:

```
PS C:\Prashant\Programming\Java\Java> java Dob
30/12/2002
12/30/2002
PS C:\Prashant\Programming\Java\Java> 
```

## Program 10. Wap to find the quotient and remainder.

Program:

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

    public static void main(String[] args) {
        Scanner scan = new Scanner(System.in);
        System.out.println("Enter first number");
        int num1 = scan.nextInt();
        System.out.println("Enter second number");
        int num2 = scan.nextInt();
        int q = num1 / num2;
        int r = num1 % num2;
        System.out.println("The quotient is: " + q + "\n The remainder is
: " + r);

        scan.close();
    }
}
```

Output:

```
PS C:\Prashant\Programming\Java\Java> java Qremainder
Enter first number
97
Enter second number
5
The quotient is: 19
The remainder is: 2
PS C:\Prashant\Programming\Java\Java> □
```