

M.K.INSTITUTE OF COMPUTER STUDIES
PROGRAMMING IN JAVA
ASSIGMENT 1
Submission Date: 3/02/2015

1. WAP to generate following:

```
      *
     * *
    *  *
   *   *
  * * * *
 * * * * *
```

2. WAP to generate following:

```
* * * * *
      *
     *
    *
   * * * * *
```

3. Write a program to find whether a given number is Armstrong number or not. (371 is an Armstrong number since $3*3*3 + 7*7*7 + 1*1*1 = 371$.)
4. Write a code to input a line of text and find out longest word in inputted text. Also apply word in following pattern
Ex: I/P: Today is my Practical Exam
O/P: Practical

```
      P
     Pr
    Pra
   Prac
  Pract
 Practi
 Practic
 Practica
 Practical
```

5. WAP to create two one-dimensional arrays. Use array reference to copy contents of array1 into array2 and then display array2. Make change in any element of array2 and then display array1.
6. WAP that accepts command-line arguments. Count how many vowels and consonant are there. (Use switch case)
7. WAP to find the area of circle. Overload the constructor to initialize the value of x, y coordinates and radius of the circle. Displays values of x, y and radius for circle1 and circle2. (make a use of this keywords)
8. A class has attributes like length and breadth. This helps it to calculate the area of rectangle and square. Another class has methods to calculate area of triangle and circle. WAP for the above mention situation. (Concept of overloading).

9. WAP that defines a Sphere class with three constructors. The first form accepts no arguments. It assumes the sphere is centered at the origin and has a radius of one unit. The second form accepts one double value that represents the radius of the sphere. It assumes the sphere is centered at the origin. The third form accepts three double arguments. These specify the coordinates of the center and the radius. Define a show () that will display all the variables of the object. Create a main () that will call all type of constructors by creating objects of Sphere and call show () for each object.