**Q1. For Loop**

class ForLoop{

public static void main(String[] args) {

for(int i = 1; i<=10 ; i++)

System.out.print(i+" ");

}

}

**Q2. Function Overloading**

import java.util.\*;

class FuncnOverloading {

static double volume(double r, double h) {

return 3.14 \* r \* r \* h;

}

static double volume(double s) {

return s \* s \* s;

}

static double volume(double l, double b, double h) {

return l \* b \* h;

}

public static void main(String[] args) {

Scanner in = new Scanner(System.in);

System.out.println("Enter: \n1. Volume of cylinder\n2. Volume of Cube\n3. Volume of Cuboid");

int choice = in.nextInt();

switch(choice){

case 1:

System.out.print("Enter the radius: ");

double radius = in.nextDouble();

System.out.print("Enter the height: ");

double height = in.nextDouble();

System.out.println(volume(radius, height));

break;

case 2:

System.out.print("Enter the side: ");

double side = in.nextDouble();

System.out.println(volume(side));

break;

case 3:

System.out.print("Enter the length: ");

double length = in.nextDouble();

System.out.print("Enter the breadth: ");

double breadth = in.nextDouble();

System.out.print("Enter the height: ");

height = in.nextDouble();

System.out.println(volume(length, breadth, height));

break;

}

}

}

**Q3. Pattern**

import java.util.Scanner;

class Pattern {

public static void main(String[] args) {

Scanner in = new Scanner(System.in);

int numOfLines = in.nextInt();

for (int i = 0; i < numOfLines; i++) {

for (int j = numOfLines-1; j > i; j--) {

System.out.print(" ");

}

for (int k = 65; k <= (65 + i); k++) {

System.out.print((char) k);

}

for (int k = (65 + i - 1); k >= 65; k--) {

System.out.print((char) k);

}

System.out.println();

}

}

}