1) Write a JAVA code with the class named ‘acad’ and a method ‘main’. Hard code the program with two integers and print the sum of those two.

public class acad {

public static void main(String[] args) {

// TODO Auto-generated method stub

int a = 10,b = 20;

System.out.println(a+b);

}

}

2) Rewrite the above code, where, inputs are provided by the user at runtime and the output is printed.

import java.util.Scanner;

public class acad {

public static void main(String[] args) {

// TODO Auto-generated method stub

int a,b;

Scanner sc = new Scanner(System.in);

a = sc.nextInt();

b = sc.nextInt();

System.out.println(a+b);

}

}

3) Write a program with a method name sum() that accepts two parameters from the user and print the sum two numbers. Output of the format should be as:

First number is:

Second number is:

Sum is:

import java.util.Scanner;

public class acad {

public static void main(String[] args) {

// TODO Auto-generated method stub

int a,b;

Scanner sc = new Scanner(System.in);

a = sc.nextInt();

b = sc.nextInt();

sum(a,b);

}

private static void sum(int a, int b) {

// TODO Auto-generated method stub

System.out.println("First number is : "+a);

System.out.println("Second number is : "+b);

System.out.println("Sum is : "+(a+b));

}

}

4) Write a program to accepts two numbers from stdin and find all the odd as well as even numbers present in between them.

import java.util.Scanner;

public class acad {

public static void main(String[] args) {

// TODO Auto-generated method stub

int a,b;

Scanner sc = new Scanner(System.in);

System.out.println("Enter the two numbers");

a = sc.nextInt();

b = sc.nextInt();

if(a<b)

{

for(int i=a;i<b;i++)

{

if(i%2!=0)

System.out.println("Odd number "+i);

else

System.out.println("Even numbers "+i);

}

}

else

{

for(int i=b;i<a;i++)

{

if(i%2!=0)

System.out.println("Odd numbers "+i);

else

System.out.println("Even numbers "+i);

}

}

}

}

5) Joe is scared to go to school. When her dad asked the reason, Joe said she is unable to complete the task given by her teacher. The task was to find the “first 10 multiples” of the number entered from stdin.

Example:

Input: 3

O/p:

3 x 1 = 3

3 x 2 = 6

………

………

…….

….

3 x 10 = 30

Help Joe in completing the task!

import java.util.Scanner;

public class acad {

public static void main(String[] args) {

// TODO Auto-generated method stub

int n;

Scanner sc = new Scanner(System.in);

n = sc.nextInt();

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

{

System.out.println(n+" \* "+i+" = "+(n\*i));

}

}

}

6) Write a program consisting method sum() and demonstrate the concept of method

overloading using this method.

import java.util.Scanner;

public class acad {

public static void main(String[] args) {

// TODO Auto-generated method stub

int a=10,b=20,c=30;

Scanner sc = new Scanner(System.in);

sum(a,b);

sum(a,b,c);

}

private static void sum(int a, int b, int c) {

// TODO Auto-generated method stub

System.out.println(a+b+c);

}

private static void sum(int a, int b) {

// TODO Auto-generated method stub

System.out.println(a+b);

}

}

7) Can you overload a method with the same return type? Explain your answer with proper logic.

In java , method overloading is not possible by changing the return type of the method only because of ambiguity.

class Adder{

static int sum(int a,int b)

{return a+b;}

static double sum(int a,int b)

{return a+b;}

}

class acad{

public static void main(String[] args){

System.out.println(Adder.sum(11,11));//ambiguity

}}

Here the output is ......... Compile time error

Reason: System.out.println(Adder.add(11,11)); // Here, how can java determine which sum() method should be called?

8) Write a program in java using Arrays that sorts the element in descending order.

import java.util.Scanner;

public class acad {

public static void main(String[] args) {

// TODO Auto-generated method stub

int n,temp;

int[] a = new int[100];

Scanner sc = new Scanner(System.in);

System.out.println("Enter the number of elements in the array");

n = sc.nextInt();

System.out.println("Enter the array elements");

for(int i=0;i<n;i++)

{

a[i] = sc.nextInt();

}

for(int i=0;i<n;i++)

{

for(int j=i+1;j<n;j++)

{

if (a[i] < a[j])

{

temp = a[i];

a[i] = a[j];

a[j] = temp;

}

}

}

System.out.println("Decending order is.....");

for(int i=0;i<n;i++)

{

System.out.println(a[i]);

}

}

}