1.Write a program to demonstrate method overloading with 3 different parameters.

Ans:

```java
public class test2 {

  static int add(int x, int y){
    return x + y;
  }

  static int add(int x, int y, int z){
    return x + y + z;
  }

  static double add(double x, double y, double z){
    return x + y + z;
  }

  public static void main(String[] args) {
    System.out.println(add(4, 7));
    System.out.println(add(4,5,9));
    System.out.println(add(4.2, 7.5, 1.2));
  }
}

Output:
11
18
12.899999999999999
```

2. Write a program to create an object of an class which contain a method and call that class method in main method.

Ans:

```java
class test{

    public int add(int x, int y){
      int result = x + y;
      return result;
    }

    public static void main(String[] args) {
    test obj = new test();
    int result = obj.add(4, 9);
```

```
      System.out.println("Result = "+ result);
   }
}
Output:
13
```

3. Write a java program to calculate the sum of all elements in an integer array.

Ans:

```java
public class test{

   public static void main(String[] args) {

      int [] nums = {10,20,30,40,50};

      int res = 0;
      for(int x : nums){
         res += x;
      }
      System.out.println("sum of all elements is = " + res);


   }
}
Output:
sum of all elements is = 150
```

4. Write a java program to find index of a specific element in an array.

Ans:

```java
import java.util.Scanner;

class test{

   public static void main(String[] args) {

      Scanner sc = new Scanner(System.in);
      int [] nums = {11,22,33,44,55,66};

      System.out.print("Enter the element: ");
      int find = sc.nextInt();

      for(int i = 0; i < nums.length; i++){
         if(find == nums[i]){
```

```
            System.out.println("Element found at index no: " + i);
            System.exit(0);
        }
    }
    System.out.println("element index is not found !!!");
  }
}
Output:
Enter the element: 55
Element found at index no: 4
```

5. Write a java program to print an entire array.

Ans:

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

      int [] a = {10,20,30,40,50,60,70,80};

      // using for loop for print
      for(int i = 0; i < a.length; i++){
         System.out.print(a[i] + " ");
      }

      System.out.println();

      // using for each loop for print
      for(int x : a){
         System.out.print(x + " ");
      }
   }
}
Output:
10 20 30 40 50 60 70 80
10 20 30 40 50 60 70 80
```