1.
Write a program to print the sum of two numbers entered by user by defining your own method.

Solution:

```
import java.util.*;

class Ans{

  public static void Sum(){
    Scanner s = new Scanner(System.in);
    int x,y;
    System.out.println("Enter a number");
    x = s.nextInt();
    System.out.println("Enter the another number");
    y = s.nextInt();
    System.out.println("Sum is "+(x+y));
  }

  public static void main(String[] args) {
    Sum();
  }
}
```

2.

Define a method that returns the product of two numbers entered by user.

3.

Write a program to print the circumference and area of a circle of radius entered by user by defining your own method.

Solution:

```
import java.util.*;

class Ans{

  public static void Circle(){
    Scanner s = new Scanner(System.in);
    int radius;
    System.out.println("Enter the radius");
    radius = s.nextInt();
    System.out.println("Circumference is "+(2*3.14*radius)+" and area is "+(3.14*radius*ra
dius));
  }

  public static void main(String[] args) {
    Circle();
  }
}
```

4.

Define two methods to print the maximum and the minimum number respectively among three numbers entered by user.

5.

Define a program to find out whether a given number is even or odd.

6.

A person is elligible to vote if his/her age is greater than or equal to 18. Define a method to find out if he/she is elligible to vote.

7.

Define a method to find out if number is prime or not.

Solution:

```
import java.util.*;

class Ans{

  public static boolean isPrime(int x){
    boolean prime = true;
    if(x>1){
      for(int i = 2;i<x;i++){
        if(x%i==0){
          prime = false;
          break;
        }
      }
    }
    else{
      prime = false;
    }
    return prime;
  }

  public static void main(String[] args) {
    System.out.println(isPrime(5));
    System.out.println(isPrime(10));
  }
}
```

8.

Write a program which will ask the user to enter his/her marks (out of 100). Define a method that will display grades according to the marks entered as below:

Marks	Grade
91-100	AA
81-90	AB
71-80	BB
61-70	BC
51-60	CD
41-50	DD
<=40	Fail

9.

Write a program to print the factorial of a number by defining a method named 'Factorial'.
Factorial of any number n is represented by n! and is equal to 1*2*3*....*(n-1)*n. E.g.-
4! = 1*2*3*4 = 24
3! = 3*2*1 = 6
2! = 2*1 = 2
Also,
1! = 1
0! = 0

Solution:

```
import java.util.*;

class Ans{

  public static int fact(int x){
    if(x == 0 || x == 1){
      return 1;
    }
    else{
      return fact(x-1)*x;
    }
  }

  public static void main(String[] args) {
    System.out.println(fact(5));
    System.out.println(fact(10));
    System.out.println(fact(1));
    System.out.println(fact(0));
  }
}
```
