

[1] // printing Hello world.

```
class HelloWorld {
    public static void main(String[] args) {
        System.out.println("My name is Raghavendra N");
        System.out.println("USN is IBM22CS213");
        System.out.println("Hello World");
    }
}
```

OutPut :-

```
My name is Raghavendra N
USN is IBM22CS213
Hello world
```

[2] // area of rectangle.

```
class RectangleArea {
    public static void main(String args[]) {
        int length, breadth;
        length = Integer.parseInt(args[0]);
        breadth = Integer.parseInt(args[1]);

        int area = length * breadth;
        System.out.println("length of rectangle
                           = " + length);
        System.out.println("breadth of
                           rectangle = " + breadth);
        System.out.println("area of rectangle
                           = " + area);
    }
}
```

Output :

length of rectangle = 5

breadth of rectangle = 3

area of rectangle = 15

[3] // Quadratic

```

import java.util.Scanner;
class Quadratic
{
    int a,b,c;
    double r1,r2,d;
    void getd()
    {
        Scanner s = new Scanner(System.in);
        System.out.println("Enter the coefficients
                           of a,b,c");
        a=s.nextInt();
        b=s.nextInt();
        c=s.nextInt();
    }
    void compute()
    {
        while(a==0)
        {
            System.out.println("Not a quadratic
                               equation");
            System.out.println("Enter a non zero
                               value for a.");
            Scanner s = new Scanner(System.in);
            a=s.nextInt();
        }
    }
}

```

$$\Delta = b^2 - 4ac;$$

if ($\Delta == 0$)

{

$$r_1 = (-b) / (2a);$$

System.out.println(" Roots are real
and equal ");

System.out.println(" Root1= Root2= "
+ r1);

}

else if ($\Delta > 0$)

{

$$r_1 = ((-b) + (\text{math.sqrt}(\Delta))) / (2a);$$

$$r_2 = ((-b) - (\text{math.sqrt}(\Delta))) / (2a);$$

System.out.println(" Roots are real
and distinct ");

System.out.println(" Root1= " + r1 + "
Root2= " + r2);

}

else if ($\Delta < 0$)

{

System.out.println(" Roots are
imaginary ");

$$r_1 = (-b) / (2a);$$

$$r_2 = \text{math.sqrt}(-\Delta) / (2a);$$

System.out.println(" Root= " + r1 +
" + i " + r2);

System.out.println(" Root1= " + r1 +
" + i " + r2);

}

{

class Quadratic main

{

 public static void main(String args[])

{

 Quadratic q = new Quadratic();
 q.getdct();

 q.computation();

{

}

Output :-

My name is Raghavendra . N

USN is 1BM22CS213

enter the coefficient of a, b, c

1

5

3

Root 1 = 0.6972243622680054 and,

Root 2 = 4.3077563331005

[4] // example of scanner

```
import java.util.Scanner;
```

```
class HelloWorld{
```

```
    public static void main(String args[])
```

{

```
        int a; float b; String s;
```

```
        Scanner in = new Scanner(System.in);
```

```
        System.out.println("Enter a string");
```

```
        s = in.nextLine();
```

```
        System.out.println("You entered string  
" + s);
```

```
System.out.println("Enter an integer");
a = in.nextInt();
System.out.println("You entered integer");
System.out.println("Enter a float");
b = in.nextFloat();
System.out.println("You entered
float " + b);
?
```

[5] Factorial of a number

```
class factorial {
    public static void main(String args[]) {
        int fac = 1;
        System.out.println("Enter a number:");
        Scanner sc = new Scanner(System.in);
        int n = sc.nextInt();
        for (int i = 1; i <= n; i++) {
            fac = fac * i;
        }
        System.out.println("The factorial:
        " + fac);
    }
}
```

?

[6] // Example to know the usage of array.

```
class AutoArray {
    public static void main(String args[]) {
        int monthDays[] = {31, 28, 31, 30, 31, 30, 31, 31,
                           30, 31, 30, 31};
        System.out.println("April has " + monthDays[3]
                           + " days.");
    }
}
```

Output :-

April has 31 days

[7] // Palindrome or not

```
class palindrome {
    public static void main(String args[])
    {
        int n, t, rem, rev=0;
        Scanner sc = new Scanner(System.in);
        System.out.println("Enter a 5 digit number:");
        n = sc.nextInt();
        t = n;
        while (t > 0) {
            rem = t % 10;
            rev = rev * 10 + rem;
            t = t / 10;
        }
        if (rev == n) {
            System.out.println("Palindrome");
        } else {
            System.out.println("not palindrome");
        }
    }
}
```

[8] // prime or not

```
import java.util.*;
```

```
class isprime {
```

```
{
```

```
    static void isprime(int n)
```

```
{
```

```
    int i, m=0, flag=0;
```

```
    m=n/2;
```

```
    if(n==0 || n==1)
```

```
{
```

```
        System.out.println("int " + " is not a prime
```

```
            number");
```

```
} else {
```

```
    for(i=2; i<=m; i++)
```

```
        if(n % i == 0)
```

```
            break;
```

```
{
```

```
    if(flag == 0)
```

```
{
```

```
        System.out.println("int " + " is a  
            prime number.");
```

```
}
```

④ public static void main(String args[])

```
{
```

```
    int i;
```

```
    Scanner sc = new Scanner(System.in);
```

```
System.out.println("Enter the value  
of i:");
```

```
i = sc.nextInt();
```

```
isPrime(i);
```

3 (b) writing below code

[9] // sum of digit

```
class sumOfDigits {
```

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

```
long number, sum;
```

```
Scanner sc = new Scanner (System.in);
```

```
System.out.print("Enter a 5-digit  
number: ");
```

```
number = sc.nextLong();
```

```
for (sum=0; number != 0; number = number /
```

```
{
```

```
sum = sum + number % 10
```

```
}
```

```
System.out.println ("sum of digits  
" + sum);
```

[10] // largest of 3 numbers.

```
class largest method {
```

```
static void largest (int i, int j, int k)
```

```
{
```

```
if (i > j & & i > k) {
```

```
System.out.println (i + " is the largest  
number.");
```

```
if (j >= i && j >= k) {
```

```
    System.out.println(j + " is the largest  
    number");
```

{

```
if (k >= i & & k >= j) {
```

```
    System.out.println(k + " is the  
    largest number");
```

{

{

for

```
public static void main(String args[])
```

{

```
    int i, j, k;
```

```
    i = Integer.parseInt(args[0]);
```

```
    j = Integer.parseInt(args[1]);
```

```
    k = Integer.parseInt(args[2]);
```

```
    largest(i, j, k);
```

{

{

;(if) finding max of three numbers

3 conditions

max of first two numbers

max of above result and third number

max of first two numbers and third number

max of above result and fourth number

max of first two numbers and fourth number

max of above result and fifth number

max of first two numbers and fifth number

max of above result and sixth number

max of first two numbers and sixth number