1)Write a program to take command line input and check number is odd or even.

```
V:\SEM-4\JAVA\Journal\1>java even
Enter any number:
2 3
2 is Even Number.
V:\SEM-4\JAVA\Journal\1>
```

2) Write a program to take command line input and sum of 2 number.

```
import java.util.Scanner;
class add
{
    public static void main(String args[])
    {
        int a,b,c;
        Scanner s=new Scanner(System.in);
        System.out.println("Enter First number:");
        a=s.nextInt();
        System.out.println("Enter Secoend number:");
        b=s.nextInt();
        c=a+b;
        System.out.println("The sum of 2 digit is:"+c);
    }
}
```

```
V:\SEM-4\JAVA\Journal\1>javac add.java
V:\SEM-4\JAVA\Journal\1>java add
Enter First number:
2 5
Enter Secoend number:
The sum of 2 digit is:7
V:\SEM-4\JAVA\Journal\1>java add
Enter First number:
4
Enter Secoend number:
5
The sum of 2 digit is:9
V:\SEM-4\JAVA\Journal\1>_
```

3)Write a program to take command line input and calculate a Simple Interest

```
import java.util.Scanner;
class simpleinterest
{
    public static void main(String args[])
    {
        int p,r,n,a;
            Scanner s=new Scanner(System.in);
            System.out.println("Enter value of princip Amount:");
            p=s.nextInt();
            System.out.println("Enter value of rate:");
            r=s.nextInt();
            System.out.println("Enter value of number of month:");
            n=s.nextInt();
            a=(p*r*n)/100;
            System.out.println("The simpleinterest is:"+a);
        }
}
```

```
V:\SEM-4\JAVA\Journal\1>javac simpleinterest
Enter value of princip Amount:
5000
Enter value of rate:
11
Enter value of number of month:
9
The simpleinterest is:4950

V:\SEM-4\JAVA\Journal\1>
```

4)Write a Program to take command line input and Check Number is Positive or Negative

```
V:\SEM-4\JAVA\Journal\1>javac positive.java
V:\SEM-4\JAVA\Journal\1>java positive
Enter any number:
2
2 is Positive Number.
V:\SEM-4\JAVA\Journal\1>javac positive.java
V:\SEM-4\JAVA\Journal\1>java positive
Enter any number:
-2
-2 is Nagative Number.
V:\SEM-4\JAVA\Journal\1>
```

5)Write a Program to take command line input and Check Year is Leap Year or Not

```
V:\SEM-4\JAVA\Journal\1>javac leapyear.java
V:\SEM-4\JAVA\Journal\1>java leapyear
Enter any year:
2022
2022 is not Leapyear.
V:\SEM-4\JAVA\Journal\1>_
```

6) Write a program to take command line input and find the Character Is Vowel or Not

```
V:\SEM-4\JAVA\Journal\1>javac vowel1.java
V:\SEM-4\JAVA\Journal\1>java vowel1
Enter any character:
a
Enter character is Vowel.
V:\SEM-4\JAVA\Journal\1>
```

7) Write a program to reverse a given number using while loop.

```
import java.util.Scanner;
class whilereverse
       public static void main(String args[])
               int a,r,c=0,b;
               Scanner s=new Scanner(System.in);
               System.out.println("Enter any Number:");
               a=s.nextInt();
               while (a>0)
               {
                      r=a%10;
                      c=c*10+r;
                      a=a/10;
               }
               System.out.println("Reverse Number is " +c);
       }
}
```

```
V:\SEM-4\JAVA\Journal\1>java whilereverse
Enter any Number:
1234
Reverse Number is 4321
V:\SEM-4\JAVA\Journal\1>
```

8) Write a program to reverse a given number using for loop.

```
import java.util.Scanner;
class forreverse
{
    public static void main(String args[])
    {
        int a,r,c=0,b,i;
        Scanner s=new Scanner(System.in);
        System.out.println("Enter any Number:");
        a=s.nextInt();
        b=a;
        for(i=0;a>0;i++)
        {
            r=a%10;
            c=c*10+r;
            a=a/10;
        }
        System.out.println("Reverse Number is " +c);
    }
}
```

```
V:\SEM-4\JAVA\Journal\1>javac forreverse.java
V:\SEM-4\JAVA\Journal\1>java forreverse
Enter any Number:
1234
Reverse Number is 4321
V:\SEM-4\JAVA\Journal\1>
```

9) Write a program to check number is Armstrong or Not

```
import java.util.Scanner;
class armstrong
       public static void main(String args[])
               int a,r,c=0,b;
               Scanner s=new Scanner(System.in);
               System.out.println("Enter any number:");
               a=s.nextInt();
               b=a;
               while (a>0)
               {
                      r=a%10;
                      c=c+r*r*r;
                      a=a/10;
               if(b==c)
                      System.out.println(b+" is Armstrong");
               else
                      System.out.println(b+" is not Armstrong");
       }
}
```

```
V:\SEM-4\JAVA\Journal\cd 1
V:\SEM-4\JAVA\Journal\1>javac armstrong.java
V:\SEM-4\JAVA\Journal\1>java armstrong
Enter any number:
2 4 6
2 is not Armstrong
V:\SEM-4\JAVA\Journal\1>_
```

10) Write a to check number is Prime number or not.

```
import java.util.Scanner;
class prime
{
       public static void main(String args[])
               int a,i,c=0;
               Scanner s=new Scanner(System.in);
               System.out.println("Enter any number:");
               a=s.nextInt();
               for(i=2;i<a;i++)
                      if(a%i==0)
                             c=1;
                             break;
               if(c==1)
                      System.out.println(a+" is not Prime Number");
               else
                      System.out.println(a+" is Prime Number");
       }
}
```

```
V:\SEM-4\JAVA\Journal\1>java prime.java
V:\SEM-4\JAVA\Journal\1>java prime
Enter any number:
21
21 is not Prime Number
V:\SEM-4\JAVA\Journal\1>_
```

12) Write a program in java to display the pattern like right angle triangle using an asterisk.

```
**
***
****
****
import java.util.Scanner;
class pattern1
{
       public static void main(String args[])
       {
               int r,i,j;
               Scanner s=new Scanner(System.in);
               System.out.println("How many row do you want to print:");
               for(i=0;i<r;i++)
               {
                      System.out.print(" ");
                      for(j=0;j<=i;j++)
                             System.out.print("* ");
                      System.out.println(" ");
               }
       }
}
```

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13) Write a program in java to make such a pattern like a pyramid with numbers increased by 1.

```
1
         2 3
   4
            5
                    6
7
                9
                        10
        8
import java.util.Scanner;
class pattern2
{
        public static void main(String args[])
        {
                int r,i,j,counter=1;
                Scanner s=new Scanner(System.in);
                System.out.println("Enter any number:");
                r=s.nextInt();
                for(i=0;i<r;i++)
                {
                        for(j = 0; j < r-i-1; j++)
                        {
                                System.out.print(" ");
                        for(int k = 0; k \le i; k++)
                        {
                                System.out.print(counter+" ");
                                counter++;
                         }
                        System.out.println();
                }
        }
}
```

```
V:\SEM-4\JAVA\Journal\1>javac pattern2.java
V:\SEM-4\JAVA\Journal\1>java pattern2
Enter any number:
5
    1
    2 3
    4 5 6
    7 8 9 10
11 12 13 14 15
V:\SEM-4\JAVA\Journal\1>_
V:\SEM-4\JAVA\Journal\1>_
```

14) Write a C Program to display the pattern using the alphabet.

```
ABCDE
ABCD
ABC
AB
```

A

```
import java.util.Scanner;
class pattern3
{
        public static void main(String args[])
        {
        int a,i,j=0;
        char c;
        Scanner s=new Scanner(System.in);
        System.out.println("Enter any number:");
        a=s.nextInt();
                for(j=a;j>=1;j--)
                {
                        c='A';
                        for(i=1;i<=j;i++)
                        {
                                System.out.print(c+" ");
                                 C++;
                        }
                        System.out.println("\n");
                }
        }
}
```

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```
V:\SEM-4\JAVA\Journal\1>java pattern3.java
V:\SEM-4\JAVA\Journal\1>java pattern3
Enter any number:
7
A B C D E F G
A B C D E F
A B C D E
A B C D
A B C
A B C
A B C
A B C
A B C
A B C
A B C
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```

15) Write a program to take command line input and print factorial of given number.

```
import java.util.Scanner;
class factorial
{
    public static void main(String args[])
    {
        int a,i,fact=1;
        Scanner s=new Scanner(System.in);
        System.out.println("Enter any number:");
        a=s.nextInt();

        for(i=1;i<=a;i++)
        {
            fact=fact*i;
        }
        System.out.println("Factorial of "+a+" is: "+fact);
      }
}</pre>
```

```
V:\SEM-4\JAVA\Journal\1>javac factorial.java
V:\SEM-4\JAVA\Journal\1>java factorial
Enter any number:
5
Factorial of 5 is: 120
V:\SEM-4\JAVA\Journal\1>
```

16) Write a program to display Fibonacci series

```
import java.util.Scanner;
class fibonacci
  public static void main(String args[])
     int a,b=0,c=1,k,i;
     Scanner s=new Scanner(System.in);
     System.out.println("Enter any number:");
     a=s.nextInt();
     System.out.print(b+" "+c);
     for(i=2;i<a;++i)
        k=b+c;
        System.out.print(" "+k);
        b=c;
        c=k;
     }
  }
/:\SEM-4\JAVA\Journal\1>javac fibonacci.java
 :\SEM-4\JAVA\Journal\1>java fibonacci
Enter any number:
 1 1 2 3 5 8 13 21 34 55 89 144 233 377
/:\SEM-4\JAVA\Journal\1>
```