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

```
import java.util.Scanner;
class even
{
   public static void main(String args[])
   {
          int a;
          Scanner s=new Scanner(System.in);
          System.out.println("Enter any number:");
          a=s.nextInt();
          if(a%2==0)
                 System.out.println(a+" is Even Number.");
          else
                 System.out.println(a+" is Odd Number.");
   }
 C:\Users\21bca74>set path=C:\Program Files (x86)\Java\jdk1.8.0_161\bin
 C:\Users\21bca74>v:
 V:\>cd kush
 V:\kush>cd sem4
 V:\kush\sem4>cd JAVA
 V:\kush\sem4\JAVA>javac even.java
 V:\kush\sem4\JAVA>java even
 Enter any number:
 12 is Even Number.
 V:\kush\sem4\JAVA>
```

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

```
import java.util.Scanner;
class sum
{
    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:\kush\sem4\JAVA>javac sum.java
V:\kush\sem4\JAVA>java sum
Enter First number:
74
Enter Secoend number:
50
The sum of 2 digit is:124
V:\kush\sem4\JAVA>_
```

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

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

```
V:\kush\sem4\JAVA>javac simint.java
V:\kush\sem4\JAVA>java simint
Enter value of p:
21
Enter value of r:
22
Enter value of n:
23
The simpleinterest is:106
V:\kush\sem4\JAVA>
```

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

```
import java.util.Scanner;
class posneg
{
     public static void main(String args[])
     {
          int a;
          Scanner s=new Scanner(System.in);
          System.out.println("Enter any number:");
          a=s.nextInt();
          if(a>0)
          System.out.println(a+" is Positive Number.");
          else
          System.out.println(a+" is Nagative Number.");
     }
}
```

```
V:\kush\sem4\JAVA>javac posneg.java
V:\kush\sem4\JAVA>java posneg
Enter any number:
74
74 is Positive Number.
V:\kush\sem4\JAVA>_
```

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

```
import java.util.Scanner;
class leapyear
{
      public static void main(String args[])
             int a;
             Scanner s=new Scanner(System.in);
             System.out.println("Enter year:");
             a=s.nextInt();
             if(a%4==0)
                    System.out.println(a+" is Leap year.");
             else
                    System.out.println(a+" is not Leap year.");
      }
}
V:\kush\sem4\JAVA>javac posneg.java
V:\kush\sem4\JAVA>java posneg
Enter any number:
74 is Positive Number.
V:\kush\sem4\JAVA>
```

6. Write a program to take command line input and find the character is vowel or Not.

```
import java.util.Scanner;
class charvowel
        public static void main(String args[])
                char a;
                Scanner s=new Scanner(System.in);
                System.out.println("Enter any character:");
                a=s.next().charAt(0);
                if(a=='a'|| a=='e'|| a=='i'|| a=='o'|| a=='u'|| a=='A'|| a=='E'|| a=='I'|| a=='O'||
a=='U')
                System.out.println("Enter character is Vowel.");
                else
                System.out.println("Enter character is Consonant");
        }
}
```

```
V:\kush\sem4\JAVA>javac charvowel.java
V:\kush\sem4\JAVA>java charvowel
Enter any character:
k
Enter character is Consonant
V:\kush\sem4\JAVA>
```

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,temp=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;
                       temp=temp*10+r;
                       a=a/10;
               System.out.println("Reverse Number is " +temp);
       }
}
```

```
V:\kush\sem4\JAVA>javac whilereverse.java
V:\kush\sem4\JAVA>java whilereverse
Enter any Number:
21
Reverse Number is 12
V:\kush\sem4\JAVA>
```

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,sum=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;
                       sum=sum*10+r;
                       a=a/10;
               System.out.println("Reverse Number is " +sum);
       }
}
```

```
V:\kush\sem4\JAVA>javac forreverse.java
V:\kush\sem4\JAVA>java forreverse
Enter any Number:
74
Reverse Number is 47
V:\kush\sem4\JAVA>
```

9. Write a program to check Armstrong or not.

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

```
V:\kush\sem4\JAVA>javac armstrong.java
V:\kush\sem4\JAVA>java armstrong
Enter any number:
74
74 is not Armstrong
V:\kush\sem4\JAVA>
```

10. Write to program check prime number or not.

```
import java.util.Scanner;
class prime
       public static void main(String args[])
               int a,i,sum=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)
                                sum=1;
                                break;
                        }
                }
                if(sum==1)
                        System.out.println(a+" is not Prime Number");
                else
                        System.out.println(a+" is Prime Number");
       }
}
```

```
V:\kush\sem4\JAVA>javac prime.java
V:\kush\sem4\JAVA>java prime
Enter any number:
74
74 is not Prime Number
V:\kush\sem4\JAVA>_
```

11. Write a program to check number is palindrome or not.

```
import java.util.Scanner;
class palindrome
       public static void main(String args[])
               int i,n,temp,sum=0;
               Scanner S=new Scanner(System.in);
               System.out.println("Enter any Number: ");
               n=S.nextInt();
               temp=n;
               while(n>0)
               {
                       i=n%10;
                       sum=(sum*10)+i;
                       n=n/10;
               if(temp==sum)
                       System.out.println("Palindrome Number");
               else
                       System.out.println("Not Palindrome Number");
       }
}
```

```
V:\kush\sem4\JAVA>javac palindrome.java
V:\kush\sem4\JAVA>java palindrome
Enter any Number:
21
Not Palindrome Number
V:\kush\sem4\JAVA>
```

12. Star Pattern

```
import java.util.Scanner;
class starpattern
       public static void main(String args[])
              int n,i,j;
              Scanner s=new Scanner(System.in);
              System.out.println("Enter number of rows you want to print:");
              n=s.nextInt();
              for(i=0;i<=n;i++)
                      for(j=1;j<=i;j++)
                             System.out.print("*");
                      System.out.println("");
              }
       }
V:\kush\sem4\JAVA>java starpattern
Enter number of rows you want to print:
V:\kush\sem4\JAVA>_
```

13. Number Pattern Pyramid

```
import java.util.Scanner;
class numberpattern
        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:\kush\sem4\JAVA>java numberpattern.java
V:\kush\sem4\JAVA>java numberpattern
Enter any number:
5
    1
    2 3
    4 5 6
   7 8 9 10
11 12 13 14 15
V:\kush\sem4\JAVA>
```

14. ABCD Pattern Pyramid

```
import java.util.Scanner;
class abcdpattern
       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");
              }
       }
V:\kush\sem4\JAVA>javac abcdpattern.java
V:\kush\sem4\JAVA>java abcdpattern
Enter any number:
ABCDE
ABCD
а в с
А В
V:\kush\sem4\JAVA>
```

15. Factorial Number Of Entered Number.

```
V:\kush\sem4\JAVA>javac factorial.java
V:\kush\sem4\JAVA>java factorial
Enter any number:
5
Factorial of 5 is: 120
V:\kush\sem4\JAVA>_
```

15

16. Fibonacci Series Of Entered Number.

```
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;
                }
        }
}
```

```
V:\kush\sem4\JAVA>javac fibonacci.java
V:\kush\sem4\JAVA>java fibonacci
Enter any number:
10
0 1 1 2 3 5 8 13 21 34
V:\kush\sem4\JAVA>java factorial
Enter any number:
5
Factorial of 5 is: 120
V:\kush\sem4\JAVA>_
```