1) **Aim:-** to write a java program for calculating students grade based on marks.

**Pseudocode:-**

step 1:- initialize the variables

step 2:- get the input marks from the user

step 3:- based on the marks category assign the grade for eg if marks > 90 grade = A

step 4:- print the grade

**Program:-**

```
package assignment;
import java.util.scanner;
public class Grade{
public static void main(string[] args){
    scanner input = new scanner(system.in);
    system.out.print("enter your marks:");
    int m = input.nextInt();
    char grade;
    if (m >= 90)
      grade = 'A';
  else if (m<90 && m>=80)
     grade = 'B';
  else if (m<80 && m>=70)
```

```
        grade = 'C';
    else if (m<70 && m>=60)
        grade = 'D';
    else
        grade = 'F';
    System.out.print("Grade = "+grade);
  }
}
```

**Sample output:-** enter your marks: 74

Grade = C

2) **Aim:-** To write java program for guessing a simple number between 1 and 10

**Psendocode:-**

step 1:- assign the variables

step 2:- using random functions assingn any number between 1 to 10

step 3:- ask the user to guess that number
- give 3 chances to users using for loop

step 4:- if number is smaller, greater or equal print the statement

step 5:- if user lost then print the system guessed number

**program:-**

```
import java.util.scanner;
public class number-guess{
public static void main(string[]args){
 Scanner input= new scanner(system.in);
 Random random= new Random();
system.out.print("guess any number
                  between 1 to 10:");
 int r= random.nextInt(10)+1;
    int i;
    for(i=0;i<3;i++){
     int a= input.nextInt();
     if(r>a)
    {
    system.out.print("too low");
     }
    else if(r<a)
     {
    system.out.print("too high");
     }
    else
     {
    system.out.print("you win");
    system.exit(0);
```

```
    }
    if(i<2)
    system.out.print("\n try again:");
    }
    if (i>=3)
    {
    system.out.print("\n you lost \n
    system.guessed "+r..+"betten luck
                next time");
    }
    }
    }
```

Sample output:-

guess any number between 1 to 10:7
too high
try again:5
too low
try again:8
too high
you lost
system guessed 6 betten luck next time

## Aim:-

to write java program for generating and displaying the multiplication table

## Pseudo code:-

step 1:- initialize the variables

step 2:- get the input number from the user

step 3:- using for loop generate the multiplication table by multiplying i with number.

step 4:- display the multiplication table

## Program:-

```
import java.util.scanner
public class multiplication_table {
 public static void main (string [] args){
  scanner input = new scanner(system.in);
  system.out.print("enter the number:");
  int a= input.next Int ();
   for (int i=1; i<10; i++)
   {
  system.out.println(a+"*"+i+"="+a*i);
   }
  }
}
```

Sample output:-

enter the number: 7

7 * 1 = 7

7 * 2 = 14

7 * 3 = 21

7 * 4 = 28

7 * 5 = 35

7 * 6 = 42

7 * 7 = 49

7 * 8 = 56

7 * 9 = 63

7 * 10 = 70

Aim:- towrite java program for even and odd counter

**Pseudocode:-**

Step 1:- initialize the variables

Step 2:- declare some number in array

step3:- check each number is divis
ible by 2

step 4:- if divisible then it is even
else it is odd number

**program:-**

```
import java.util.scanner;
public class even-odd-count {
public static void main( string[ ]
                          args) {
scanner input = new scanner(system
                          .in);
int [ ] a = {2, 3, 4, 5, 6};
int ec=0, oc=0;
for (int i=0; i<a.length; i++)
{
if (a[i]%2 == = 0)
```

```
    {
    ec++;
    }
    else
    {
    oc++;
    }
   }
  }
System.out.print("number of even
        numbers = "+ec);
System.out.print("number of odd
        numbers = "+oc);
    }
   }
```

**Output:-**

number of even numbers = 3

number of Odd numbers = 2

Aim:-

10 write java program for simulating a basic ATM system

Program:-

```
import java.util.scanner;
 public class atm{
 public static void main(string [ ]args){
 scanner input = new scanner (system
 int i=1000;                          .in);
 boolean ch= true;
 while(ch){
 System.out.println(" choose the
        operation\n1.Deposit\n2.with
        Draw\n3.check Balance\n4.exit");
 int a= input.next Int();
 if(a==1)
 {
 system.out.print(" enter the amou
        nt todeposit:");
 int d.= input.next Int();
  int =d;
```

```
System.out.print("\nAmount Deposited
    successfully");
 }
else if(a==2)
{
System.out.print ("enter the amount to
    withdraw:");
int w=input.nextInt();
 if (in>w)
 in-=w;
 else
system.out.print("\nsufficient
 balance\n");
system.out.print("Balance updated
    successfully\n"); }
 else if(a==3)
 {
system.out.print("\n your Balance
            :"+in+"\n");
  }
 else
 {
system.out.print("closing---");
```

```
system.exit(0);
}
}
}
}
```

**Sample output:**

```
choose the operation 1. deposit 2. withdraw
  3. check Balance 4. exit
1) enter the amount to deposit : 200
 choose the operation : 2
 enter the amount to withdraw : 150
 Balance updated successfully
 choose the operation : 3
 Available Balance : 1050
 choose the operation : 4
   closing ---
```