CSA-0914 — Assignment-1

[Programming for Java]

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1. Aim:- To write a Java program for Student Grading System.

Pseudo Code:-

Step-1 — Start and declare variable

Step-2 — Get inputs from user store it in Score

Step-3 — if score >= 90 print grade A

elseif score ≥ 80 print grade B

elseif score ≥ 70 print grade C

else Score < 60 print grade f

Step-4 — End program

Program:-

```
import java.util.Scanner;
public class grade {
public static void main(String[] args) {
```

```
Scanner input = new Scanner(System.in);
System.out.println("Enter student score");
int Score = input.nextInt();
Char grade;
if (score >= 90){
    grade = 'A';
}
else if (score >= 80){
    grade = 'B';
}
else if (score >= 70){
    grade = 'C' }
else if (score >= 60){
    grade = 'D'; }
else {
    grade = 'F';
}
System.out.println("The grade is: " + grade);
}
}
```

Output:-

Enter the student score = 80

The grade is: "B"

(2) Aim:- To write a java program for number guessing game

Pseudo code:-

Step1 — Begin and declare variable

Step2 — Create class number and define range for the random number.

Step3 — declare lower = 1 & upper = 10

Step4 — Generate random number and declare use guess and number of Hits = 3

Step5 — use while loop(useoname != num)

Step6 — Enter user name & user guess

Step7 — if (userguess (number to guess))

print low, try again

else if (user guess > number to guess)

print high, try again

else

print Congratulation

Scanner Close(); & end

program—

```
import java.util.Scanner;
import java.util.Random;
public class guess {
    public static void main (String[] args){
Scanner input = new Scanner (System.in);
Random random = new random();
  int lower = 1;
  int upper = 10;
int number guess = random.new(int (upper-lower+1)
int user guess = 0;
int number/tries = 3;
while (user guess != number guess){
System.out.println(" Enter your guess ");
    user guess = input.next int();
    number of tries ++;
if (user guess < number guess){
    System.out.println (" to low! try again ");
}
```

3

```
else {
System.out.println("Congratulations")}
}
```

Output :-

Enter your guess : 5

Too low! try again

Enter your guess : 9

Congurations your guessed the number in 2 times

(3) Aim :- To write Java program for Multiplication table program.

pseudocode —

Step1 — Start and declare variable

Step2 — Create class table and declare num

Step3 — Get input number from user

Step4 — Begin for loop (i=0 to n) & logic n * i = n * i & print & end

program —

```
import Java.util.Scanner;
```

```
public class table{
 public static void main (String[] args){
Scanner input = new Scanner( System.in);
System.out.println("Enter a number:");
int num = input.nextInt();
 for(int i = 1; i <= 10; i++)
 {
System.out.println(num+" x "+i+" = "+
 num * i"); }
 input.close();
 }
}
```

Output:- Enter a number :- 4

4*1=4
4×2=8
4×3=12
4×4=16
4×5=20
4×6=24
4×7=28
4×8=32
4×9=36
4×10=40 //

...ram for ATM

5. **Aim:** To write java program for Counting Even and odd number.

Pseudocode

Step1 — start and declare variable

Step2 - get input from user and declare Even = 0 and odd = 0

Step3 - Begin for loop (i=0 to n-1)

Step4 — if (num % 2 == 0) then even+1 else odd+1 & exit loop & print odd, even and end.

Program

```
import java.util.scanner;
public class Count {
public static void main (String[] args) {
Scanner input = new Scanner (System.in);
System.out.println("Enter number of
Elements");
int n = input.nextInt();
int[] number = new int[];
```

```
int even = 0;
int odd = 0;
System.out.println("Enter number:");
for (int i = 0; i<n; i++) {
  number[i] = input.nextInt();
  if (number[i] % 2 == 0){
    even++;}
  else{
    odd++;}
  }
System.out.println("no. of even num" + even);
System.out.println(" no. of odd num" + odd);
  input.close();
  }
}
```

output :-

Enter the elements — 2 3 4 7 6 9 7.

No. of even — 3

No of odd — 4 "

5 Aim:- to write java program for ATM Simulation

pseudo code —

Step1 — start and declare class ATM and initilize balance = 1000

Step2 - using while (lexit)

Welcome to ATM

please choose an option

1. Balance 2. Deposit

3. Withdraw 4. Exit

Step3 — Choice — balance

Choice — deposite

deposit (amount > 0)

balance = Amount;

Step4 — Begin for loop (i = 0 to n-1)

Step5 — Print output & end.

program —

```
import java.util.Scanner;

public class ATM {
```

```
public static void main (String[] args){
 Scanner scanner = new Scanner (System.in);
 Double balance = 1000.0;
  boolean exit = false;
 While (!exit) {
 System. out. println ("Welcome to ATM");
 System. out. println (" please choice an op");
 System. out. println(" 1. check balance");
 System. out. println ("2. Deposit");
 System. out. println (" 3. Withdraw");
  int choice = scanner. nextInt();
   Int choice = scanner . nextInt( );
  Switch (choice) {
  Case 1: System. out. println (" Enter
        amout to deposit);
        break;
  Case 2 : System. out. println(" amout ")
        break;
  default : }} scanner. close( ); }}
```

Output:-

Welcome to ATM

please choose an option

1. Check balance

2. Deposit amount

3. Withdraw

4. Exit

Enter your choice — 1

Your balance — 1

Enter your choice — 4

Thanks you for using ATM.