

Java Programming:

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Assignment-1:

Aim:- To write a program in java 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");
```

```
        if (m >= 90);
```

```
            grade = 'A';
```

```
        else if (m < 90 & m >= 80)
```

```
            grade = 'B';
```

```
        else if (m < 80 & m >= 70)
```

```
}
```

```
}.
```

Sample output enter your marks : 74

grade = C.

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

Pseudocode:

step1 : assign the variable.

step2 : using random function assign any number between 1 to 10.

step3 : ask the user to guess that number

give 3 chances to user using for loop.

step4 : if number is smaller , greater or equal

print the statement.

Program:

```
import java.util.Scanner;  
public class number-guess {  
    public static void main (String[] args) {  
        Scanner input = new Scanner (System.in);  
        System.out.print ("100 100");  
    }  
    else if (ca)  
    {  
        System.out.print ("too high");  
    }  
}
```

```

System.out.println("Welcome to the guessing game!");
System.out.print("Enter a number between 1 to 10: ");
int userNumber = Integer.parseInt(System.console().readLine());
int randomNum = (int) (Math.random() * 10 + 1);
int count = 0;
while (userNumber != randomNum) {
    if (userNumber < randomNum) {
        System.out.println("Your guess is too low.");
    } else {
        System.out.println("Your guess is too high.");
    }
    userNumber = Integer.parseInt(System.console().readLine());
    count++;
}
System.out.println("Congratulations! You won the game in " + count + " tries.");

```

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 Letter luck next time.

3)

Aim: To write java program for generating and displaying the multiplication table

Pseudocode

Step 1: Initialize the ~~no~~ variable.
2

Step 1: get the input number from the user.

Step 2: using for loop generate the multiplication.

Step 3: 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.nextInt();
        for (int i = 1; i < 10; i++) {
            System.out.print (a + " * " + i + " = " + a * i);
        }
    }
}
```

Sample output:

enter the number : 7

$$7 \times 1 = 7$$

$$7 \times 8 = 56$$

$$7 \times 2 = 14$$

$$7 \times 9 = 63$$

$$7 \times 3 = 21$$

$$7 \times 10 = 70$$

$$7 \times 4 = 28$$

$$7 \times 5 = 35$$

$$7 \times 6 = 42$$

$$7 \times 7 = 49$$

4) How to write java program for even and odd counter

Pseudocode

Step 1) Initialize the variable;

Step 2) Feed all same number in array

Step 3) Check each number is divisible by 2

Step 4) If divisible then it is even else it is odd number.

Program

```
import java.util.Scanner;  
public class evenOddCount {  
    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++) {  
            {  
                System.out.print ("Number of even numbers")  
            }  
        }  
    }.
```

Output

No. of even numbers = 3
No. of odd numbers = 2

5. Aim: To write a java program for simulations a basic ATM system.

Program:

```
import java.util.Scanner;

public class atm {
    public static void main (String [] args) {
        Scanner input = new Scanner (System.in);
        int i = 1000;
        boolean n = true;
        while (n) {
            System.out.println ("Choose the operation");
            int a = input.nextInt();
            if (a == 1)
            {
                System.out.print ("Enter the amount to deposit");
                int d = input.nextInt();
                int id;
                System.exit (0);
            }
            else if (a == 2)
            {
                System.out.print ("Enter the amount to withdraw");
                int w = input.nextInt();
                int id;
                System.exit (0);
            }
        }
    }
}
```

sample output

enter the amount to deposit 200
choose the operation : 2.

Balance updated successfully.