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CSA0914

Assignment - 1

1. Aim: To write a java program for calculating students grade based on marks.

Pseudo Code:

- > Initialize the variables.
- > Get the input marks from user.
- > Based on the marks category assign the grade for. eg if marks > 90 grade = A
- > 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.next int();
        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);
    }
}
```

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.println (a + "*" + i + "=" + a * i);
        }
    }
}

```

Sample Output:

Enter the number : 1

1x1 = 1	1x6 = 6
1x2 = 2	1x7 = 7
1x3 = 3	1x8 = 8
1x4 = 4	1x9 = 9
1x5 = 5	1x10 = 10

4. Aim: To write java program for even and odd counter.

Pseudo code:

- > Initialize the variables.
- > Declare some number in array.
- > Check it 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);
    }
}

```

O/P:
Enter your marks : 74
Grade = C

2. Aim: To write java program for guessing a simple number b/w 1 & 10.

Pseudo Code:

- > Assign the variables.
- > Using random functions assign any number b/w 1 & 10.
- > 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  
        b/w 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 on");  
            }  
            else if  
            {
```



```

system.out.print("you win");
system.exit(0);
}
if (i > 2)
system.out.print("int again:");
}
if (i >= 3)
{
system.out.print("In game you lost\n");
system.out.print("guessed " + r + " better luck\n");
system.out.print("next time");
}
}
}

```

O/p:

Guess any number b/w 1 to 10 : 7

too high

try again : 5

too low

try again : 8

too high

you lost

system guessed 6 better luck next time.

3. Aim:

To write java program for generating and displaying the table

Pseudo code:

- > Initialize the variables.
- > Get the input number from user.
- > Display the multiplication table.

```

system.out.print ("enter the amount
to deposit :");
int d = input.next Int C);
int d;
system.out.print ("In Amount deposited
successfully");
}
else if (a == 2)
{
system.out.print ("enter the amount
to withdraw :");
int w = input.next Int C);
if (ih > w)
in -= w;
else
system.out.print ("Insufficient balance");
else if (a == 3)
{
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....

```

    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:

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

5. Aim:
 To 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.in);
        int i = 1000;
        boolean cn = true;
        while (cn) {

```