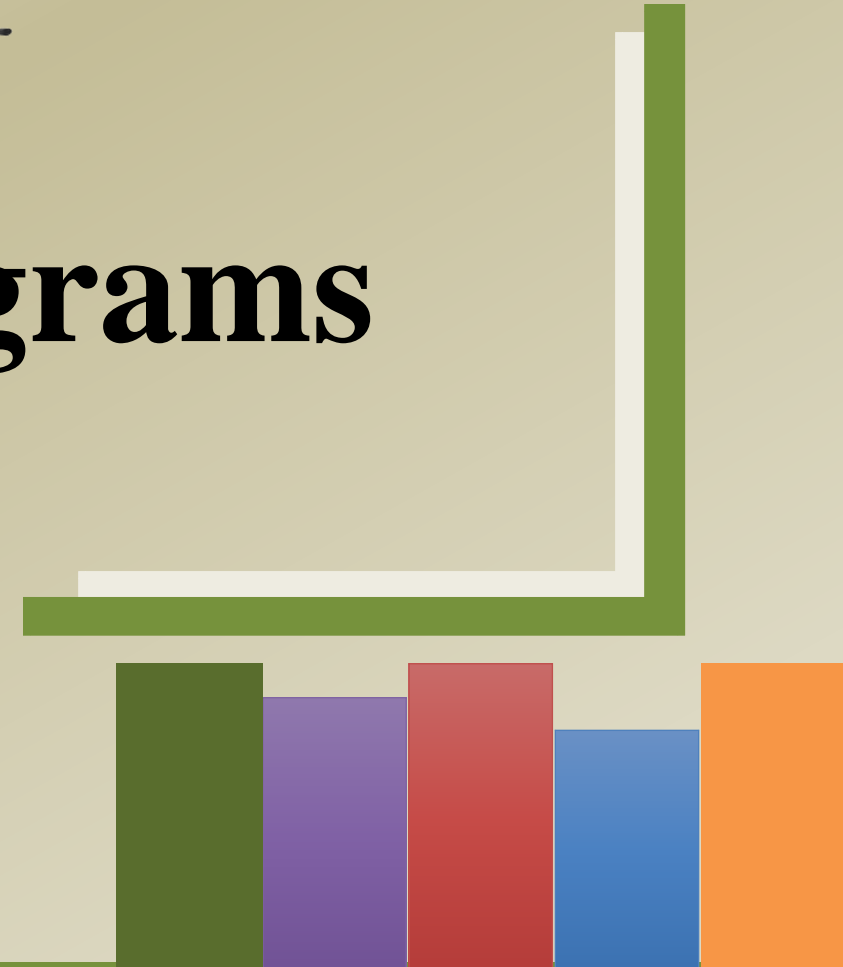




Menu Driven Programs



Problem Statement 1

1. Write a Menu Driven Program (WAMDP) to display the menu and ask the user's choice. Based on the user's choice, perform the respective operation on the given numbers and print the result. If the choice is not from the given list i.e., greater than 5 or less than 1 then print "Wrong Choice".

Choice	Operation
1	Add
2	Subtract
3	Multiplication
4	Division
5	Modulus

- Explanation: If the choice of the user is 3 and the given two numbers are 4 and 23 then the result of the multiplication operation is $4 * 23 = 92$.

Solution of Problem 1

```
import java.util.*;

class calculator {

    public static void main(String Args[ ]) {

        int a,b,ch,result=0;

        Scanner sc = new Scanner(System.in);

        System.out.println("1. Add");
        System.out.println("2.Subtract");
        System.out.println("3. Multiply");
        System.out.println("4. Divison");
        System.out.println("5. Modulus");
        System.out.println("Enter Choice");

        ch = sc.nextInt();
        System.out.println("Enter two numbers to perform operation");
        a = sc.nextInt();
        b = sc.nextInt();
        if(ch==1)
            result= a+b;
        else if(ch==2)
            result= a-b;
        else if(ch==3)
            result= a*b;
        else if(ch==4)
            result= a/b;
        else if(ch==5)
            result= a%b;
        else
            System.out.println("Invalid Choice");
        System.out.println("Your result is"+result);
    }
}
```

Problem Statement 2

1. Write a Menu Driven Program (WAMDP) to display the menu ask the user's choice and take the input of length and breadth of the rectangle. Based on the user's choice, apply the respective formula and print the result. If the choice is not from the given list i.e., greater than 3 or less than 1 then print "Wrong Choice".

Choice	To Find
1	Perimeter of rectangle
2	Area of rectangle
3	Diagonal

- Explanation: If the choice of the user is 3 and the given length and breadth are 4 and 3 then the result is the area of rectangle :- $3*4 = 12$.

Solution of Problem 2

```
import java.util.*;
class rectangle {
    public static void main(String Args[ ]) {
        int l,b,ch;
        double result;
        Scanner sc = new Scanner(System.in);
        System.out.println("1. Area");
        System.out.println("2. Perimeter");
        System.out.println("3. Diagonal");
        System.out.println("Enter Choice");
        ch = sc.nextInt();
        System.out.println("Enter length and
breadth");
        l = sc.nextInt();
        b = sc.nextInt();
        if(ch==1)
        {
            result= l*b;
        }
    }
}
```

```
    else if(ch==2)
    {
        result= 2*(l+b);
    }
    else if(ch==3)
    {
        result= Math.sqrt(l*l+b*b);
    }
    else
    {
        result= 0;
        System.out.println("Invalid Choice");
    }
    if(result>0)
    {
        System.out.println("Your result is"+ result);
    }
}
```

Practice Questions

1. WAMDP to input temperature in Celsius and print the equivalent temperature accordingly:
 - *Kelvin*
 - *Fahrenheit*
2. WAMDP to display area and perimeter of:
 - *Circle*
 - *Square*
 - *Rectangle*