

/*A student gives an online quiz. The result system uses a postfix expression to calculate the total score

based on the answers and weightage. The evaluator evaluates expressions like "93+5*" (which is equivalent to $(9 + 3) * 5$) to calculate the score dynamically.

Your task is to:

- Evaluate different postfix expressions.
- Explain each step (can be printed as stack trace).
- Accept multiple expressions as sample inputs. (Get user input)

Writing a Java program to evaluate postfix expressions*/

```
package julyhometask;
```

```
import java.util.Stack;
```

```
import java.util.*;
```

```
public class july18ht
```

```
{
```

```
    public static int evaluatePostfix(String postfix)
```

```
    {
```

```
        Stack<Integer>stack=new Stack<>();
```

```
        for(int i=0;i<postfix.length();i++)
```

```
        {
```

```
            char ch=postfix.charAt(i);
```

```
            if(Character.isDigit(ch))
```

```
            {
```

```
                stack.push(ch-'0');
```

```
                System.out.println("The "+ch+" is pushed to the stack  
successfully\nThe stack is:"+stack);
```

```
            }
```

```
            else
```

```
            {
```

```
                int v1=stack.pop();
```

```
                int v2=stack.pop();
```

```

        switch(ch)
        {
        case '+':
            stack.push(v1+v2);
            System.out.println("The "+v1+" and "+v2+" is added\nThe
stack is:"+stack);

            break;
        case '-':
            stack.push(v1-v2);
            System.out.println("The "+v1+" and "+v2+" is
subtracted\nThe stack is:"+stack);

            break;
        case '*':
            stack.push(v1*v2);
            System.out.println("The "+v1+" and "+v2+" is
multiplied\nThe stack is:"+stack);

            break;
        case '/':
            stack.push(v1/v2);
            System.out.println("The "+v1+" and "+v2+" is divided\nThe
stack is:"+stack);

            break;

        }
    }

    return stack.pop();
}

```

```

public static void main(String[] args)

```

```
{  
    System.out.println("Enter the expression");  
    Scanner sc=new Scanner(System.in);  
    String expression=sc.next();  
    int result=evaluatePostfix(expression);  
    System.out.println("The evaluated answer is:"+result);  
}  
  
}
```