

12) EVALUATION OF POSTFIX EXPRESSION

This sum is extension of the previous sum

CODE OF THE PROGRAM:

```
class Solution
{
    public:
        //Function to evaluate a postfix expression.
        bool isOperator(char x){
            if(x=='*'||x=='/'||x=='+'||x=='-'){
                return true;
            }
            else{
                return false;
            }
        }
        int evaluatePostfix(string S)
        {
            stack<int> s;
            for(int i=0;i<S.length();i++){
                if(isOperator(S[i])==true){
                    int k=s.top();
                    s.pop();
                    int j=s.top();
                    s.pop();
                    if(S[i]=='*'){
                        int ans=j*k;
                        s.push(ans);
                    }
                    else if(S[i]=='/'){
                        int ans=j/k;
                        s.push(ans);
                    }
                    else if(S[i]=='+'){
                        int ans=j+k;
                        s.push(ans);
                    }
                    else{
                        int ans=j-k;
                        s.push(ans);
                    }
                }
                else{
                    s.push(int(S[i])-48);
                }
            }
            return s.top();
        }
    };
};
```

```
}  
};
```