

C-program for evaluation

```
#include <stdio.h>
```

```
#include <math.h>
```

```
#include <string.h>
```

```
double compute(char symbol, double op1, double op2)
```

```
{
```

```
    switch (symbol)
```

```
    {
```

```
        case '+':
```

```
            return (op1 + op2);
```

```
        case '-':
```

```
            return (op1 - op2);
```

```
        case '*':
```

```
            return (op1 * op2);
```

```
        case '/':
```

```
            return (op1 / op2);
```

```
        case '^':
```

```
        case 'n':
```

```
            return (op1 ^ op2);
```

```
    }
```

```
}
```

```
void main ( )
```

```
{
```

```
    double s[20];
```

```
double res;
```

```
double op1, op2;
```

```
int top;
```

```
char postfix[100], symbol;
```

```
printf("Enter the postfix expression\n");  
scanf("%s", postfix);
```

```
top = -1;
```

```
for(i = 0; i < strlen(postfix); i++)
```

```
{ symbol = postfix[i];
```

```
if (isoperator(symbol))
```

```
if (isdigit(symbol))
```

```
{
```

```
    s[top++] = symbol - '0';
```

```
else
```

```
{
```

```
    op2 = s[top--];
```

```
    op1 = s[top--];
```

```
    res = compute(symbol, op1, op2);
```

```
    s[top++] = res;
```

```
}
```

```
}
```

```
res = s[top--];
```

```
printf("The result is = %d\n", res);
```

```
}
```