

→ Postfix Evaluation

```
#include <stdio.h>
int stack[20];
int top = -1;

void push (int u)
{
    stack[++top] = u;
}

int pop()
{
    return stack[top--];
}

int main()
{
```

```
    char exp[20];
```

```
    char *e;
```

```
    int n1, n2, n3, num;
```

```
    printf("Enter the expression");
```

```
    scanf("%s", exp);
```

```
    e = exp;
```

```
    while (*e != '\0')
```

```
    {
```

```
        if (isdigit(*e))
```

```
        {
```

```
            num = *e - 48;
```

```
            push(num);
```

```
        }
```

```
        else
```

```
        {
```

```
            n2 = pop();
```

```
            n1 = pop();
```

```
            switch (*e)
```

```
            {
```

```
                case '+':
```

```
                {
```

```
                    n3 = n1 + n2;
```

```
                    break;
```

```
                }
```

```
                case '-':
```

```
                {
```

```
                    n3 = n2 - n1;
```

```
                    break;
```

```
                }
```

```
                case '*':
```

```
                {
```

```
                    n3 = n1 * n2;
```

```
                    break;
```

```
                }
```

```
                case '/':
```

```
                {
```

```
                    n3 = n2 / n1;
```

```
                }
```

```
                }
```

```
            }
```

```
        }
```

```
        push(n3);
```

```
    }
```

```
    e++;
```

```
    }
```

```
    printf("The result of exp  
is %d", n3);
```

```
    }
```

→ output

2310 + 9 =

The result of expression

2310 + 9 = -4