

## Postfix expression evaluation

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

```
int stack[20];
```

```
int top = -1;
```

```
void push(int x)
```

```
{
```

```
    stack[++top] = x;
```

```
}
```

```
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')
```

```
{
```

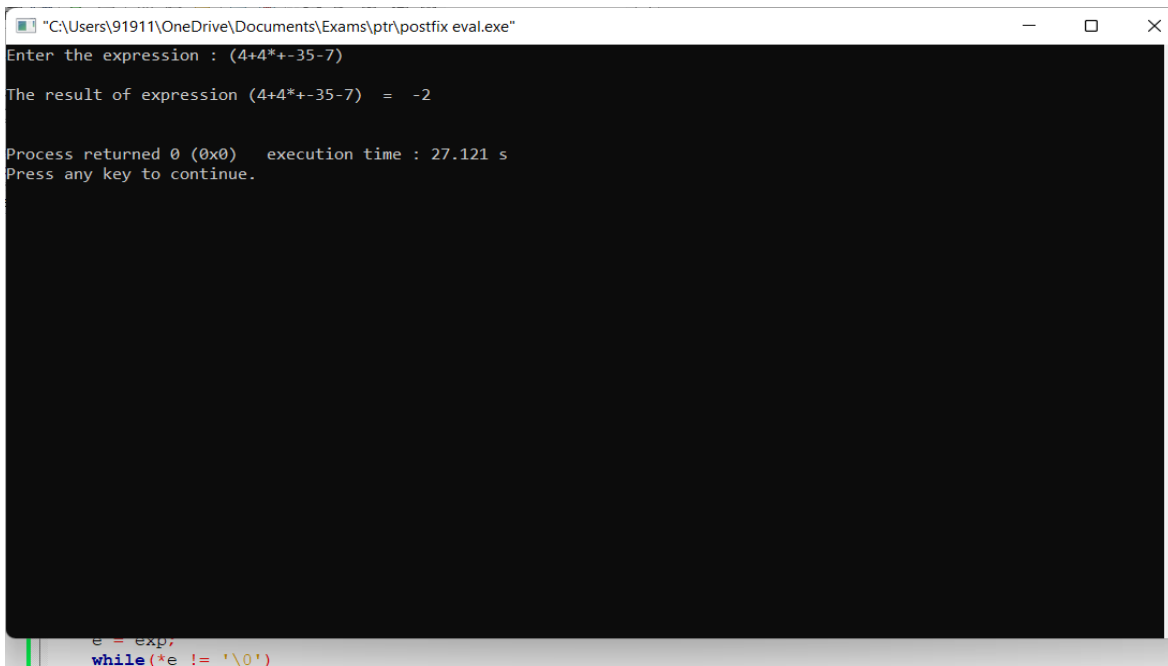
```
if(isdigit(*e))
{
    num = *e - 48;
    push(num);
}
else
{
    n1 = pop();
    n2 = pop();
    switch(*e)
    {
        case '+':
        {
            n3 = n1 + n2;
            break;
        }
        case '-':
        {
            n3 = n2 - n1;
            break;
        }
        case '*':
        {
            n3 = n1 * n2;
            break;
        }
    }
}
```

```

        case '/':
        {
            n3 = n2 / n1;
            break;
        }
    }
    push(n3);
}
e++;
}
printf("\nThe result of expression %s = %d\n\n",exp,pop());
return 0;
}

```

## Output:



```

"C:\Users\91911\OneDrive\Documents\Exams\ptr\postfix eval.exe"
Enter the expression : (4+4*+-35-7)
The result of expression (4+4*+-35-7) = -2
Process returned 0 (0x0) execution time : 27.121 s
Press any key to continue.

```