**Practical -: C Program to Evaluate POSTFIX Expression Using Stack**

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**Code -:**

**#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++;**

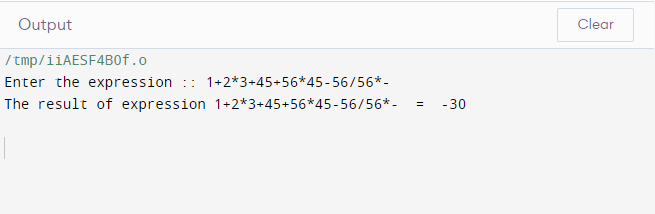
**}**

**printf("\nThe result of expression %s = %d\n\n",exp,pop());**

**return 0;**

**}**

**Output -:**

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