**Evaluating Arithmetic Expression**

#include <stdio.h>

#include <string.h>

#define Max 20

int stack [MAX]; int top = -1;

char expr[MAX];

Void Push (int elen);

int pop();

int main()

{

int i, a, b, c, e;

printf("Enter the post fix expression:”);

gets (expr);

for (i=0; i<strlen(expr); i++)

{

if (expr[i]=='+' || expr[i]==`-’ || expr[i] == ‘\*’ || expr[i] == ‘/’)

{

b= pop();

a = pop();

Switch (expr [i])

{

case '+': c=a+b; push (c); break;

case '-': c=a-b; push (c); break;

case '\*': c=a\*b; push (c); break;

case '/': c=a/b; push (c); break;

}

}

else

{

printf(' Enter the value of % C", exp[i]);

Scanf ("%d", &e);

Push (e);

}

}

printf("The result is %d", pop ());

return 0;

}

void push (int ele).

{

top = top + 1;

stack [top]= elem;

}

intpop ()

{

int e;

e = stack[top];

top=top-1;

return e;

}

**Output**

Enter the Postfix expression: abc+ \*d\*

Enter the value of a: 2

Enter the value of b: 3

Enter the value of c: 4

Enter the value of d: 5

The result is 70.

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