YASH GUPTA

1BM21CS251

**EVALUATION OF POSTFIX**

**INPUT**

#include<stdio.h>

#include<math.h>

int value[20],stack[20],top=-1;

char postfix[20];

void push(int val){

top++;

stack[top]=val;

};

int pop(){

int val;

val=stack[top];

top--;

return val;

};

int evaluate(){

int i=0;

char ch;

while(postfix[i]!='\0'){

ch=postfix[i];

if(isalpha(ch)){

push(value[i]);

}

else{

int op1,op2;

op1=pop();

op2=pop();

switch(ch){

case('+'):

push(op1+op2);

break;

case('-'):

push(op1-op2);

break;

case('\*'):

push(op1\*op2);

break;

case('/'):

push(op1/op2);

break;

case('^'):

push(pow(op1,op2));

break;

}

}

i++;

}

int result=pop();

return(result);

}

int main(){

printf("enter the postfix expression\n");

scanf("%s",postfix);

int i=0;

int result;

while(postfix[i]!='\0'){

if(isalpha(postfix[i])){

printf("enter the value of operand\n");

scanf("%d",&value[i]);

}

i++;

}

result=evaluate();

printf("result=%d",result);

return 0;

}

**OUTPUT**

