**5.** Design, Develop and Implement a Program in C forbEvaluation of **Suffix expression** with single digit operands and operators: **+, -, \*, /, %, ^**

#include<stdio.h>

#include<ctype.h>

#include<math.h>

int s[20];

int top=-1;

void push(int);

int pop();

int main()

{

char postfix[20];

int op1,op2,res,i;

printf("enter the postfix expression:");

scanf("%s",postfix);

**for(i=0;postfix[i]!='\0';i++)**

{

**if(isdigit(postfix[i]))**

**push(postfix[i]-'0');**

else

{

op2=pop();

op1=pop();

**switch(postfix[i])**

{

case '+':res=op1+op2;

push(res);

break;

case '-':res=op1-op2;

push(res);

break;

case '\*':res=op1\*op2;

push(res);

break;

case '/':res=op1/op2;

push(res);

break;

case '%':res=op1%op2;

push(res);

break;

case '^':res=pow(op1,op2);

push(res);

break;

}

}

}

printf("postfix expression is:%d",res);

return 0;

}

**void push(intch)**

**{**

**s[++top]=ch;**

**}**

**int pop()**

**{**

**return(s[top--]);**

**}**