STACK USSING ARRAY

#include<stdio.h>

#include<conio.h>

#define MAX 5

int stack[MAX],top=-1;

int push();

int pop();

int peek();

int display();

int main()

{

int ch;

do

{

printf("\n\*\*\*\*\*MAIN MENU\*\*\*\*\*\n");

printf("1.PUSH\n");

printf("2.POP\n");

printf("3.PEEK\n");

printf("4.DISPLAY\n");

printf("5.EXIT\n");

printf("Enter your option:");

scanf("%d",&ch);

switch(ch)

{

case 1:push();

break;

case 2:pop();

break;

case 3:peek();

break;

case 4:display();

break;

}

}

while(ch!=5);

return 0;

}

int push()

{

int item;

if(top==MAX-1)

printf("OVERFLOW");

else

{

printf("Enter the element to push:");

scanf("%d",&item);

top=top+1;

stack[top]=item;

}

return 0;

}

int pop()

{

int val;

if(top==-1)

printf("UNDERFLOW");

else

{

val=stack[top];

top=top-1;

printf("poped element is %d",val);

}

return 0;

}

int peek()

{

if(top==-1)

printf("STACK IS EMPTY");

else

{

printf("top element is %d",stack[top]);

}

return 0;

}

int display()

{

int i;

if(top==-1)

printf("STACK IS EMPTY");

else

{

printf("\*\*\*STACK\*\*\*\n");

for(i=0;i<=top;i++)

printf("%d",stack[i]);

}

return 0;

}