WEEK1

TO DEMONSTRATE STACKS USING ARRAYS

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#include<stdio.h>

#include<conio.h>

#define SIZE 3

int STACK[SIZE],TOP=-1,ITEM;

void push();

void pop();

void display();

void main()

{ int choice;

while(1)

{

printf(‘‘\n\n 1:push\n 2:pop\n 3:display\n 4:exit\n’‘);

printf(‘‘enter your choice’‘);

scanf(‘‘%d’‘,&choice);

switch(choice)

{

case 1:push();

break;

case 2: pop();

break;

case 3: display();

break;

case 4: exit(0);

break;

default: printf(‘‘wrong choice’‘);

}

}

getch();

}

void push()

{

if(TOP==SIZE-1)

{

printf(‘‘stack overflow’‘);

return;

}

else

{

printf(‘‘enter an element\n’‘);

scanf(‘‘%d’‘,&ITEM);

printf(‘‘entered element is %d\n\n’‘,ITEM);

TOP=TOP+1;

STACK[TOP]=ITEM;

}

}

void pop()

{

int del;

if(TOP==-1)

{

printf(‘‘stack underflow\n’‘);

return;

}

else

{

del=STACK[TOP];

printf(‘‘poped element is %d\n’‘,del);

TOP=TOP-1;

}

}

void display()

{

int i;

if(TOP==-1)

{

printf(‘‘STACK IS EMPTY\n’‘);

return;

}

else

{

for(i=TOP;i>=0;i--)

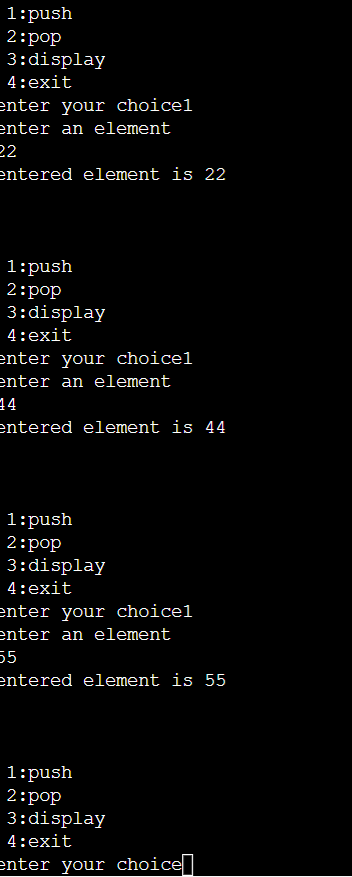
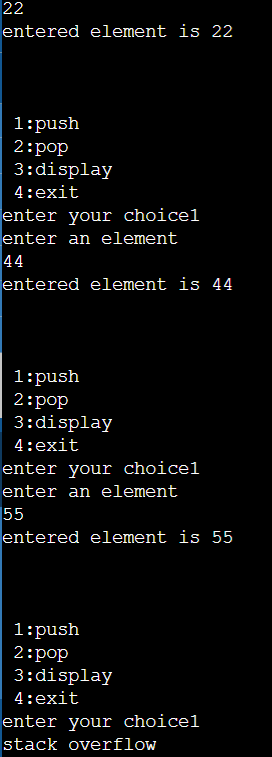
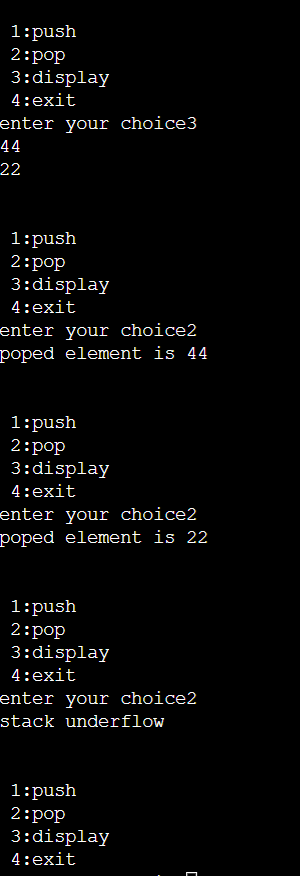
{

printf(‘‘%d\n’‘,STACK[i]);

}

}

}

SNAPSHOTS OF OUTPUT