#include <stdio.h>

int pop(int \*stack,int top ,int max)

{

if (top!=-1)

{ printf("%d.(%d)\n",top,stack[top]);

int data=stack[top-1];

top=top-1;

return top;

}

else

{

printf("stack is empty\n");

}

return top;

}

int push(int \*stack,int top ,int max)

{

if (top!=max-1)

{int data;

printf("enter num,top=%d\n",top);

scanf("%d",&data);

stack[top+1]=data;

top=top+1;

}

else

{

printf("stack is full\n");

}

return top;

}

void peep(int \*stack,int top ,int max)

{

if (top!=-1)

{

printf("%d.(%d)\n",top,stack[top]);

}

else

{

printf("stack is empty\n");

}

}

void change(int \*stack,int top ,int max)

{int ch;

printf("enter num to be replaced with\n");

scanf("%d",&ch);

if(top!=-1)

{for (int i=0;i<max;i++)

{

if(stack[i]==ch)

{

printf("element has been found,enter num to replace\n");

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

break;

}

}

}

else

{

printf("stack is empty\n");

}

}

void display(int \*stack,int top ,int max)

{

if (top>=0)

{for (int i=top+1,j;i>0;i--,j++)

printf("stack[%d]=%d\n",i-1,stack[i-1]);

}

else

{

printf("stack is empty\n");

}

}

int main()

{int max,op;

printf("enter stack max size");

scanf("%d",&max);

int stack[max],top=-1;

label:

printf("select an option\n1.push\n2.peep\n3.display\n4.change\n5.pop\n");

scanf("%d",&op);

switch (op)

{

case 1:

top=push(stack,top,max);

break;

case 2:

peep(stack,top,max);

break;

case 3:

display(stack,top,max);

break;

case 4:

change(stack,top,max);

break;

case 5:

top=pop(stack,top,max);

break;

default:

printf("enter correct option\n");

}goto label;

label2:

return 0;

}

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output:

enter stack max size3

select an option

1.push

2.peep

3.display

4.change

5.pop

1

enter num,top=-1

15

select an option

1.push

2.peep

3.display

4.change

5.pop

1

enter num,top=0

25

select an option

1.push

2.peep

3.display

4.change

5.pop

1

enter num,top=1

35

select an option

1.push

2.peep

3.display

4.change

5.pop

1

stack is full

select an option

1.push

2.peep

3.display

4.change

5.pop

45 2

2.(35)

select an option

1.push

2.peep

3.display

4.change

5.pop

3

stack[2]=35

stack[1]=25

stack[0]=15

select an option

1.push

2.peep

3.display

4.change

5.pop

4

enter num to be replaced with

35

element has been found,enter num to replace

45

select an option

1.push

2.peep

3.display

4.change

5.pop

5

2.(45)

select an option

1.push

2.peep

3.display

4.change

5.pop

3

stack[1]=25

stack[0]=15

select an option

1.push

2.peep

3.display

4.change

5.pop