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**//implementation of stack using array**

```
#include<stdio.h>
int stack[100],n,choice,top,i,element;
void push(void);
void pop(void);
void display(void);

int main()
{
	top=-1;
	printf("\nEnter the size of the Stack:");
	scanf("%d",&n);

	printf("\n\t 1.push  \n\t 2.pop \n\t 3.display \n\t 4.exit");


	do{
		printf("\nChoose operation you want to perfom on stack:\n");
		scanf("%d",&choice);
		switch(choice){
			case 1:push();
			break;

			case 2:pop();
			break;

			case 3:display();
			break;

			case 4:printf("Exit");
			break;

			default:printf("\nEnter a valid choice\n");
		}
	}while(choice!=4);

	return 0;
}

void push(){
if(top>=n-1){
	printf("OVERFLOW");
}
else{
	printf("Enter element you want to push:");
	scanf("%d",&element);
	top++;
	stack[top]=element;
}
}

void pop(){
if(top>=0){
	printf("Pop element:%d",stack[top]);
	top--;
}
else{
```

```
        printf("UNDERFLOW");
}
}

void display(){
        if(top>=0){
        printf("\nElements of stack are:");
        for(i=top;i>=0;i--){
                printf("%d ",stack[i]);
        }
}
else{
        printf("Stack is empty");
}

}
```

**OUTPUT**