

```
#include <stdio.h>
#define size 3
int top = -1;
void push (int [], int);
int pop (int []);
void display (int []);
```

```
int main (int argc, char *argv)
```

```
{
```

```
    int size, int [size];
    int choice, element;
    char ch;
```

```
do
```

```
{ printf ("Enter size of array\n");
```

```
  scanf ("%d", &size);
```

```
  printf ("Enter your choice\n 1. Push\n 2. Pop\n 3. Display\n");
```

```
  scanf ("%d", &choice);
```

```
  switch (choice)
```

```
{
```

```
    case 1:
```

```
        printf ("Enter the element to be pushed\n");
```

```
        scanf ("%d", &element);
```

```
        push (stack, element);
```

```
        break;
```

```
    case 2:
```

```
        element = pop (stack);
```

```
        if (element == -1)
```

```
            printf ("Stack Underflow");
```

```
        else
```

```
            printf ("Popped element is %d\n", element);
```

```
        break;
```

```
    case 3:
```

```
        display (stack);
```

```
        break;
```



```

    {
        printf("%d\t", stack[i]);
    }
}

int main (int argc, char *argv)
{
    int size, int [size];
    int choice, element;
    char ch;
    do
    {
        printf("Enter size of array\n");
        scanf ("%d", &size);
        printf("Enter your choice\n 1. Push\n 2. Pop\n 3. Display\n");
        scanf ("%d", &choice);
        switch (choice)
        {
            case 1:
                printf("Enter the element to be pushed\n");
                scanf ("%d", &element);
                push (stack, element);
                break;
            case 2:
                element = pop (stack);
                if (element == -1)
                    printf("Stack underflow");
                else
                    printf("Popped element is %d\n", element);
                break;
            case 3:
                display (stack);
                break;
        }
    }
}

```



```
void push (int stack[], int ele)
{
```

```
    if (top == size-1)
    {
```

```
        printf("Stack overflow");
    }
```

```
    else
    {
```

```
        top ++;
```

```
        stack[top] = ele;
    }
```

```
}
```

```
int pop (int stack[])
{
```

```
    int popele;
```

```
    if (top == -1)
        return -1;
```

```
    else
    {
```

```
        popele = stack[top];
```

```
        top --;
```

```
        return (popele);
    }
```

```
}
```

```
void display (int stack[])
{
```

```
    int i;
```

```
    printf("The stack elements \n");
```

```
    for (i = top; i >= 0; i --)
```



```
default:  
    printf("Invalid choice");  
}  
printf("Do you want to continue:\n");  
flush(stdin);  
scanf("%c", &ch);  
}  
while (ch == 'y' || ch == 'Y');  
return 0;  
}
```


{

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

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