

Program Stack

```
#include <iostream>
#include<stdlib.h>
#define max 10
using namespace std;
int stack[max],top,temp;
int main()
{
    int ch,number;
    top=-1;
    do
    {
        cout<<"\n1.Push the elements on the stack";
        cout<<"\n2.Pop the elements from the stack";
        cout<<"\n3.Display elements of stack";
        cout<<"\n4.Exit:";
        cout<<"\nEnter your choice:";
        cin>>ch;

        switch(ch)
        {
            case 1:
                cout<<"Enter the element";
                cin>>number;

                if((top+1) == max)
                    cout<<"\nSack is full";
                else
                {
                    top++;
                    stack[top]=number;
                }
                temp=top;
                break;

            case 2:
                top=temp;
                if(top== -1 )
                    cout<<"\n stack is empty";
                else
                {
                    number = stack[top];
                    top--;

                    cout<<number<< "\t is popped";
                }
                break;

            case 3:
                if(top== -1)
                    cout<<"\nThe stack is empty";
                else
                {
                    cout<<"Contents of stack are :\n";
                    while ( top != -1 )
                    {
                        number=stack[top];
                        top--;
                    }
                }
            }
        }
    }
```

```

        cout<<number<< "\t";
    }
}
cout<<"\n Do you want to goto Main Menu[1/0]";
cin>>ch;
}
while(ch==1);
}

```

Output:

```

1.Push the elements on the stack
2.Pop the elements from the stack
3.Display elements of stack
4.Exit:
Enter your choice:1
Enter the element2

```

```

    Do you want to goto Main Menu[1/0]1

```

```

1.Push the elements on the stack
2.Pop the elements from the stack
3.Display elements of stack
4.Exit:
Enter your choice:2
2    is popped
    Do you want to goto Main Menu[1/0]1

```

```

1.Push the elements on the stack
2.Pop the elements from the stack
3.Display elements of stack
4.Exit:
Enter your choice:3
The stack is empty
Do you want to goto Main Menu[1/0]0

```