

Day – 16 of the 101 days coding Challenge

-----Stack-----
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⇒ Stack follows the principle of the LIFO (Last in first out)

⇒ Code:

```
#include<iostream>

using namespace std;

int arr[30], top = -1; // top is used for the index of the data
void push(int data) // inserting the data into the stack
{
    top+=1; // incrementing the top for inserting the data
    arr[top] = data;
}

void pop() // deleting the data
{
    if(top == -1) // during the empty stack
        cout<<"Empty stack"<<endl;
    else
    {
        top--; // decrementing the index's data
    }
}

void display() // displaying the data of the stack
{
    for(int i = top; i>=0; i--)
    {
```

```

        cout<<arr[i]<<endl;
    }
}
int main()
{
    push(20);
    push(30);
    push(40);
    cout<<"All the inserted data"<<endl;
    display();
    pop();
    cout<<"After deleting the one data"<<endl;
    display();
    return 0;
}

```

⇒ Output:

```

All the inserted data
40
30
20
After deleting the one data
30
20

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Process exited after 0.09338 seconds with return value 0
Press any key to continue . . .

```