

## Week-2 Stack implementation.

1<sup>st</sup> pseudo code

```
* define MAX 5
```

```
int top = -1, stack[MAX]
```

```
void push();
```

```
void pop();
```

```
void display();
```

```
int main()
```

```
{
```

```
int ch;
```

```
while (1)
```

```
{
```

```
printf("Stack menu);
```

```
printf("\n 1.Push 2.Pop 3.Display 4.Exit")
```

```
printf("Enter your choice/
```

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

```
switch (ch)
```

```
{ case 1: push();  
break;
```

```
case 2: pop();  
break
```

```
case 3: display();  
break
```

```
case 4: exit(0);
```

```
default: printf("Wrong input: ");
```

```
}
```

```
}
```

```
}
```



```
void pop()
```

```
test
```

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

```
{
```

```
printf("Stack is empty");
```

```
}
```

```
else
```

```
{
```

```
printf("Deleted element is %d", stack[top]);
```

```
top = top - 1;
```

```
}
```

```
}
```



```
void push()
```

```
int val;
```

```
if (top == max - 1)
```

```
{
```

```
printf("stack is empty");
```

```
else
```

```
printf("Deleted element is %d", stack[top]);
```

```
top = top - 1;
```

```
}
```

```
}
```

```
void display()
```

```
{
```

```
int i;
```

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

```
printf("stack is empty!");
```

```
{
```

```
else
```

```
printf("stack is ");
```

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

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

```
}
```

```
}
```