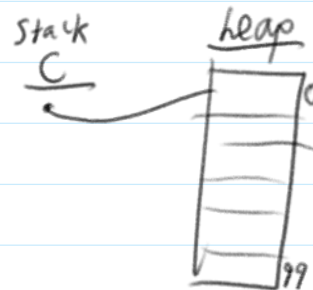


This course covers object-oriented programming techniques to design and develop large-scaled software solutions. Topics include design patterns, UML modeling, unit testing, encapsulation, polymorphism, persistence, and inheritance. Extensive programming is required.

```
int[] c = new int[100]
```

```
int x=50; 50
```



Class Rules

No global variables

No breaks out of a loop

Name on top + assignment name

```
while(n<1 || n>10 || n!=-1)
```

Class assignments will assume correct input type

```
while((n<1 || n>10) ? n!=-1)
```

```
while((n<1 || n>10) ? n!=-1)
```

Non exhaustive Sequential Search Pattern

```
l = 0;
Found = false;
While (l < stuff.length && !found) {
    If (stuff.charAt(i) == 'p') {
        Found = true;
    }
    l = l + 1;
}
```

Used to search if letter 'p' appears in a string of text.

stuff	i	found
0	0	false
1	1	true

The letter p was found

stuff	i	found	output
0	0	false	The letter p has not been found
1	1	false	
2	2	false	

Flowchart for sequential search

ctr	i	found	output
0	0	false	The letter p was not found
1	1	false	
2	2	false	
3	3	false	

Exhaustive Sequential Search Pattern

```

Ctr = 0;
For (int i = 0; i < stuff.length(); ++i) {
    If (stuff.charAt(i) == 'p') {
        Ctr = ctr + 1;
    }
}
System.out.println(ctr);

```

Same as non-exhaustive, but
searches entire string.

