

Brief Review of 'C':

Assignment Operator

```
a = 4;  
b = a * a ;  
c = b + a;
```

'C' compiler assigns a separate memory location to every new variable on the left side of the assignment operator.

if and if...else

```
if (condition expression)  
    statement1;  
statement2;
```

Statement 2 will be executed anyway.

```
if (condition expression)  
    statement1;  
else  
    statement2;  
statement 3;
```

Grades for 220 students of section 1 of COP3223 are available for an exam. Students are to be grouped as per following scheme:

- *group 1 : 85 and above*
- *group 2 : 70 to 84*
- *group 3 : 50 to 69*
- *group 4 : below 50*

It is desired to find out the number of students in each group.

```
#include<stdio.h>
int main ( ) {
    int grade, group1, group2, group3,
group4;
    group1= group2 = group3 = group4 = 0;

    for (jj = 1;          jj <=220;      jj++)
    {
        printf ("\n enter grade:");
        scanf ("%d", &grade);
        if (grade >= 85 )
            group1++ ;
        else if ( grade >69 )
            group2++ ;
        else if ( grade >49 )
            group3++ ;
        else
            group4++;
    }

    printf ("\n group1= %d, group2= %d ",group1, group2);
    printf ("\n group3= %d, group4= %d ",group3, group4);
    return 0;
}
```

Operator precedence:

When an expression contains number of operators, they are processed in a particular order

! - (unary operators) e.g. - 45

*** / %**

+ -

< <= >= >

== !=

&&

| |

= (assignment operator)

`if(a < b+c && c==d || a > e)`