

Condition

# Grading Problem: Revisited

Use only Relational Operator. No Logical Operator

97-100	A+	67-69	C-
90-96	A	63-66	D+
87-89	A-	60-62	D
83-86	B+	<60	F
80-82	B		
77-79	B-		
73-76	C+		
70-72	C		

# Grading Problem: Using >=

```
int mark;  
scanf("%d", &mark);
```

# Grading Problem: Using >=

```
int mark;  
scanf("%d", &mark);  
if(mark >= 97)  
{  
    printf("A+\n");  
}
```


97-100	A+
--------	----



# Grading Problem: Using >=

```
int mark;  
scanf("%d", &mark);  
if(mark >= 97){  
    printf("A+\n");  
}  
else if(mark >= 90)  
{  
    printf("A\n");  
}
```

90-96	A
-------	---



# Grading Problem: Using >=

```
int mark;  
scanf("%d", &mark);  
if(mark >= 97){  
    printf("A+\n");  
}  
else if(mark >=90){  
    printf("A\n");  
}  
else if(mark >= 87)  
{  
    printf("A-\n");  
}
```

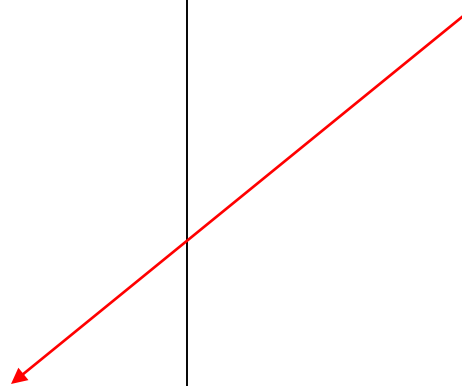
87-90	A-
-------	----



# Grading Problem: Using >=

```
int mark;  
scanf("%d", &mark);  
if(mark >= 97){  
    printf("A+\n");  
}  
else if(mark >= 90){  
    printf("A\n");  
}  
else if(mark >= 87){  
    printf("A-\n");  
}  
...  
...  
else {  
    printf("F\n");  
}
```

<60	F
-----	---



# Grading Problem: Using >=

```
if( mark >= 97 ){
    printf("A+\n");
}
else if( mark >= 90 ){
    printf("A\n");
}
else if( mark >= 87 ){
    printf("A-\n");
}
else if( mark >= 83 ){
    printf("B+\n");
}
else if( mark >= 80 ){
    printf("B\n");
}
else if( mark >= 77 ){
    printf("B-\n");
}
```

```
else if( mark >= 73 ){
    printf("C+\n");
}
else if( mark >= 70 ){
    printf("C\n");
}
else if( mark >= 67 ){
    printf("C-\n");
}
else if( mark >= 63 ){
    printf("D+\n");
}
else if( mark >= 60 ){
    printf("D\n");
}
else {
    printf("F\n");
}
```

mark

79



# Grading Problem: Using >=

```
if( mark >= 97 ){  
    printf("A+\n");  
}  
else if( mark >= 90 ){  
    printf("A\n");  
}  
else if( mark >= 87 ){  
    printf("A-\n");  
}  
else if( mark >= 83 ){  
    printf("B+\n");  
}  
else if( mark >= 80 ){  
    printf("B\n");  
}  
else if( mark >= 77 ){  
    printf("B-\n");  
}
```

```
else if( mark >= 73 ){  
    printf("C+\n");  
}  
else if( mark >= 70 ){  
    printf("C\n");  
}  
else if( mark >= 67 ){  
    printf("C-\n");  
}  
else if( mark >= 63 ){  
    printf("D+\n");  
}  
else if( mark >= 60 ){  
    printf("D\n");  
}  
else {  
    printf("F\n");  
}
```

mark

79

# Grading Problem: Using >=

```
if( mark >= 97 ){  
    printf("A+\n");  
}  
else if( mark >= 90 ){  
    printf("A\n");  
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else if( mark >= 87 ){  
    printf("A-\n");  
}  
else if( mark >= 83 ){  
    printf("B+\n");  
}  
else if( mark >= 80 ){  
    printf("B\n");  
}  
else if( mark >= 77 ){  
    printf("B-\n");  
}
```

```
else if( mark >= 73 ){  
    printf("C+\n");  
}  
else if( mark >= 70 ){  
    printf("C\n");  
}  
else if( mark >= 67 ){  
    printf("C-\n");  
}  
else if( mark >= 63 ){  
    printf("D+\n");  
}  
else if( mark >= 60 ){  
    printf("D\n");  
}  
else {  
    printf("F\n");  
}
```

mark

79

# Grading Problem: Using >=

```
if( mark >= 97 ){
    printf("A+\n");
}
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    printf("A\n");
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else if( mark >= 87 ){
    printf("A-\n");
}
else if( mark >= 83 ){
    printf("B+\n");
}
else if( mark >= 80 ){
    printf("B\n");
}
else if( mark >= 77 ){
    printf("B-\n");
}
```

```
else if( mark >= 73 ){
    printf("C+\n");
}
else if( mark >= 70 ){
    printf("C\n");
}
else if( mark >= 67 ){
    printf("C-\n");
}
else if( mark >= 63 ){
    printf("D+\n");
}
else if( mark >= 60 ){
    printf("D\n");
}
else {
    printf("F\n");
}
```

mark

79

# Grading Problem: Using >=

```
if( mark >= 97 ){
    printf("A+\n");
}
else if( mark >= 90 ){
    printf("A\n");
}
else if( mark >= 87 ){
    printf("A-\n");
}
else if( mark >= 83 ){
    printf("B+\n");
}
else if( mark >= 80 ){
    printf("B\n");
}
else if( mark >= 77 ){
    printf("B-\n");
}
```

```
else if( mark >= 73 ){
    printf("C+\n");
}
else if( mark >= 70 ){
    printf("C\n");
}
else if( mark >= 67 ){
    printf("C-\n");
}
else if( mark >= 63 ){
    printf("D+\n");
}
else if( mark >= 60 ){
    printf("D\n");
}
else {
    printf("F\n");
}
```

mark

79

# Grading Problem: Using >=

```
if( mark >= 97 ){
    printf("A+\n");
}
else if( mark >= 90 ){
    printf("A\n");
}
else if( mark >= 87 ){
    printf("A-\n");
}
else if( mark >= 83 ){
    printf("B+\n");
}
else if( mark >= 80 ){
    printf("B\n");
}
else if( mark >= 77 ){
    printf("B-\n");
}
```

```
else if( mark >= 73 ){
    printf("C+\n");
}
else if( mark >= 70 ){
    printf("C\n");
}
else if( mark >= 67 ){
    printf("C-\n");
}
else if( mark >= 63 ){
    printf("D+\n");
}
else if( mark >= 60 ){
    printf("D\n");
}
else {
    printf("F\n");
}
```

mark

79

# Grading Problem: Using >=

```
if( mark >= 97 ){  
    printf("A+\n");  
}  
else if( mark >= 90 ){  
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else if( mark >= 87 ){  
    printf("A-\n");  
}  
else if( mark >= 83 ){  
    printf("B+\n");  
}  
else if( mark >= 80 ){  
    printf("B\n");  
}  
else if( mark >= 77 ){  
    printf("B-\n");  
}
```

```
else if( mark >= 73 ){  
    printf("C+\n");  
}  
else if( mark >= 70 ){  
    printf("C\n");  
}  
else if( mark >= 67 ){  
    printf("C-\n");  
}  
else if( mark >= 63 ){  
    printf("D+\n");  
}  
else if( mark >= 60 ){  
    printf("D\n");  
}  
else {  
    printf("F\n");  
}
```

mark

79

# Grading Problem: Using >=

```
if( mark >= 97 ){  
    printf("A+\n");  
}  
else if( mark >= 90 ){  
    printf("A\n");  
}  
else if( mark >= 87 ){  
    printf("A-\n");  
}  
else if( mark >= 83 ){  
    printf("B+\n");  
}  
else if( mark >= 80 ){  
    printf("B\n");  
}  
else if( mark >= 77 ){  
    printf("B-\n");  
}
```

```
else if( mark >= 73 ){  
    printf("C+\n");  
}  
else if( mark >= 70 ){  
    printf("C\n");  
}  
else if( mark >= 67 ){  
    printf("C-\n");  
}  
else if( mark >= 63 ){  
    printf("D+\n");  
}  
else if( mark >= 60 ){  
    printf("D\n");  
}  
else {  
    printf("F\n");  
}
```

mark

79

B-

# Grading Problem: Using <=

```
if( mark <= 100 ){  
    printf("A+\n");  
}  
else if( mark <= 96 ){  
    printf("A\n");  
}  
else if( mark <= 90 ){  
    printf("A-\n");  
}  
else if( mark <= 87 ){  
    printf("B+\n");  
}  
else if( mark <= 83 ){  
    printf("B\n");  
}  
else if( mark <= 80 ){  
    printf("B-\n");  
}
```

mark

79



# Grading Problem: Using <=

```
if( mark <= 100 ){  
    printf("A+\n");  
}  
else if( mark <= 96 ){  
    printf("A\n");  
}  
else if( mark <= 90 ){  
    printf("A-\n");  
}  
else if( mark <= 87 ){  
    printf("B+\n");  
}  
else if( mark <= 83 ){  
    printf("B\n");  
}  
else if( mark <= 80 ){  
    printf("B-\n");  
}
```

mark

79

# Grading Problem: Using <=

```
if( mark <= 100 ){  
    printf("A+\n");  
}  
else if( mark <= 96 ){  
    printf("A\n");  
}  
else if( mark <= 90 ){  
    printf("A-\n");  
}  
else if( mark <= 87 ){  
    printf("B+\n");  
}  
else if( mark <= 83 ){  
    printf("B\n");  
}  
else if( mark <= 80 ){  
    printf("B-\n");  
}
```

B-

mark 79

A+

# Grading Problem: Using <=

```
if( mark <= 100 ){  
    printf("A+\n");  
}  
else if( mark <= 95 ){  
    printf("A\n");  
}  
else if( mark <= 90 ){  
    printf("A-\n");  
}  
else if( mark <= 87 ){  
    printf("B+\n");  
}  
else if( mark <= 83 ){  
    printf("B\n");  
}  
else if( mark <= 80 ){  
    printf("B-\n");  
}
```

B-

mark 79

A+

# Grading Problem: Using <=

```
if( mark < 60 ){  
    printf("F\n");  
}  
else if( mark <= 62 ){  
    printf("D\n");  
}  
else if( mark <= 66 ){  
    printf("D+\n");  
}  
else if( mark <= 69 ){  
    printf("C-\n");  
}  
else if( mark <= 72 ){  
    printf("C\n");  
}  
else if( mark <= 76 ){  
    printf("C+\n");  
}
```

# Grading Problem: Using <=

```
if( mark < 60 ){  
    printf("F\n");  
}  
else if( mark <= 62 ){  
    printf("D\n");  
}  
else if( mark <= 66 ){  
    printf("D+\n");  
}  
else if( mark <= 69 ){  
    printf("C-\n");  
}  
else if( mark <= 72 ){  
    printf("C\n");  
}  
else if( mark <= 76 ){  
    printf("C+\n");  
}
```

Ordering is very  
important!!!!  
What condition you are  
going to use first

# Check The validity of a triangle and which type is it

```
if(a+b > c && b+c > a && c+a > b){  
    if(a==b && b==c && c==a){  
        printf("Equilateral triangle\n");  
    }  
    else if(a==b || b==c || c==a){  
        printf("Isosceles triangle\n");  
    }  
    else{  
        printf("Scalene Triangle\n");  
    }  
}  
else{  
    printf("Not a valid triangle\n");  
}
```

a

3

b

4

c

4

# Check The validity of a triangle and which type is it

```
if(a+b > c && b+c > a && c+a > b){  
    if(a==b && b==c && c==a){  
        printf("Equilateral triangle\n");  
    }  
    else if(a==b || b==c || c==a){  
        printf("Isosceles triangle\n");  
    }  
    else{  
        printf("Scalene Triangle\n");  
    }  
}  
else{  
    printf("Not a valid triangle\n");  
}
```

a

4

b

4

c

4

# Check The validity of a triangle and which type is it

```
if(a+b > c && b+c > a && c+a > b){  
    if(a==b && b==c && c==a){  
        printf("Equilateral triangle\n");  
    }  
    else if(a==b || b==c || c==a){  
        printf("Isosceles triangle\n");  
    }  
    else{  
        printf("Scalene Triangle\n");  
    }  
}  
else{  
    printf("Not a valid triangle\n");  
}
```

a

4

b

4

c

4

Equilateral triangle



# Check The validity of a triangle and which type is it

What if we change the order of these 2 conditions?

```
if(a+b > c && b+c > a && c+a > b){  
    if(a==b && b==c && c==a){  
        printf("Equilateral triangle\n");  
    }  
    else if(a==b || b==c || c==a){  
        printf("Isosceles triangle\n");  
    }  
    else{  
        printf("Scalene Triangle\n");  
    }  
}  
else{  
    printf("Not a valid triangle\n");  
}
```

a	4
b	4
c	4

# Check The validity of a triangle and which type is it

What if we change the order of these 2 conditions?

```
if(a+b > c && b+c > a && c+a > b){  
    if(a==b || b==c || c==a){  
        printf("Isosceles triangle\n");  
    }  
    else if(a==b && b==c && c==a){  
        printf("Equilateral triangle\n");  
    }  
    else{  
        printf("Scalene Triangle\n");  
    }  
}  
else{  
    printf("Not a valid triangle\n");  
}
```

a	4
b	4
c	4

# Check The validity of a triangle and which type is it

What if we change the order of these 2 conditions?

```
if(a+b > c && b+c > a && c+a > b){  
    if(a==b || b==c || c==a){  
        printf("Isosceles triangle\n");  
    }  
    else if(a==b && b==c && c==a){  
        printf("Equilateral triangle\n");  
    }  
    else{  
        printf("Scalene Triangle\n");  
    }  
}  
else{  
    printf("Not a valid triangle\n");  
}
```

a

4

b

4

c

4

Isosceles triangle

# Finding min between 5 numbers

```
int min;  
if ( a < b ){  
    min = a;  
}  
else{  
    min = b;  
}  
if ( c < min ){  
    min = c;  
}  
if ( d < min ){  
    min = d;  
}  
if ( e < min )  
{  
    min = e;  
}
```

a 1      b 2      c 3  
          d 4      e 0

# Finding min between 5 numbers

```
int min;
```

```
if ( a < b ){  
    min = a;  
}  
else{  
    min = b;  
}  
if ( c < min ){  
    min = c;  
}  
if ( d < min ){  
    min = d;  
}  
if ( e < min )  
{  
    min = e;  
}
```

min

a  1    b  2    c  3

d  4    e  0

# Finding min between 5 numbers

```
int min;  
if ( a < b ){  
    min = a;  
}  
else{  
    min = b;  
}  
if ( c < min ){  
    min = c;  
}  
if ( d < min ){  
    min = d;  
}  
if ( e < min )  
{  
    min = e;  
}
```

min

a  b  c   
d  e

# Finding min between 5 numbers

```
int min;  
if ( a < b ){  
    min = a;  
}  
else{  
    min = b;  
}  
if ( c < min ){  
    min = c;  
}  
if ( d < min ){  
    min = d;  
}  
if ( e < min )  
{  
    min = e;  
}
```

min 1

a 1    b 2    c 3  
d 4    e 0

# Finding min between 5 numbers

```
int min;  
if ( a < b ){  
    min = a;  
}  
else{  
    min = b;  
}  
if ( c < min ){  
    min = c;  
}  
if ( d < min ){  
    min = d;  
}  
if ( e < min )  
{  
    min = e;  
}
```

min 1

a 1    b 2    c 3

d 4    e 0



# Finding min between 5 numbers

```
int min;  
if ( a < b ){  
    min = a;  
}  
else{  
    min = b;  
}  
if ( c < min ){  
    min = c;  
}  
if ( d < min ){  
    min = d;  
}  
if ( e < min )  
{  
    min = e;  
}
```

min 1

a 1    b 2    c 3

d 0    e 3

# Finding min between 5 numbers

```
int min;  
if ( a < b ){  
    min = a;  
}  
else{  
    min = b;  
}  
if ( c < min ){  
    min = c;  
}  
if ( d < min ){  
    min = d;  
}  
if ( e < min )  
{  
    min = e;  
}
```

min 0

a 1    b 2    c 3

d 0    e 3

# Finding min between 5 numbers

```
int min;  
if ( a < b ){  
    min = a;  
}  
else{  
    min = b;  
}  
if ( c < min ){  
    min = c;  
}  
if ( d < min ){  
    min = d;  
}  
if ( e < min )  
{  
    min = e;  
}
```

min 0

a 1    b 2    c 3

d 0    e 3

# Finding min between 5 numbers

```
int min;  
if ( a < b ){  
    min = a;  
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else{  
    min = b;  
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if ( c < min ){  
    min = c;  
}  
if ( d < min ){  
    min = d;  
}  
if ( e < min )  
{  
    min = e;  
}
```

min 0

a 1    b 2    c 3  
d 0    e 3