# Operators Associativity and Precedence Assignment

1. Use operator associativity, evaluate the folowing expressions and predict the output
   1. x = 34 + 12/4 – 56

X= -19

* 1. 12 + 3 - 4 / 2 < 3 + 1

false

* 1. (2 + (3 + 2) ) \* 10

70

* 1. 34 + 12/4 – 45

-8

1. Rewrite the following expressions with improved readability
   1. age < 18 && height < 48 || age > 60 && height > 72

(age < 18 && height < 48) || (age > 60 && height > 72)

* 1. char name value

char name[] = "value";

* 1. char $name

char name;

1. Predict the value of a after each statement.

int main(void)

{

int i = 10;

char a = 'd';

a += 10;

a \*= 5;

a /= 4;

a %= 2;

a \*= a + i;

**return** 0;

}

* **Step 1**: a = 110
* **Step 2**: a = 550
* **Step 3**: a = 137
* **Step 4**: a = 1
* **Step 5**: a = 11

1. Consider a = 12, b = 3, predict the output of the following .
   1. (a>100) && (b<10)
   2. (a==4) && (b==2)
   3. (a==11) && (a++)

**a.** (a > 100) && (b < 10) → **false**

**b.** (a == 4) && (b == 2) → **false**

**c.** (a == 11) && (a++) → **false**

1. Consider a = 10, b = 11, predict the output of the following .
   1. (a>10) || (b<10)
   2. a || 12.12
   3. a || b
   4. !(a > 5)

**a.** (a > 10) || (b < 10) → **false**

**b.** a || 12.12 → **true**

**c.** a || b → **true**

**d.** !(a > 5) → **false**

1. Consider int age = 10, height = 45, year = 2000; Predict the output of the following.
   1. (age < 12 && height < 48) || (age > 65 && height > 72)
   2. (year % 4 == 0 && year % 100 != 0 ) || (year % 400 == 0);

**a.** (age < 12 && height < 48) || (age > 65 && height > 72) → **true**

**b.** (year % 4 == 0 && year % 100 != 0 ) || (year % 400 == 0) → **true**