Operators Associativity and Precedence Assignment

1. Use operator associativity, evaluate the folowing expressions and predict the output

a. x = 34 + 12/4 – 56 : -19

b. 12 + 3 - 4 / 2 < 3 + 1 : false -

c. (2 + (3 + 2) ) \* 10 : 70

d. 34 + 12/4 – 45 : -8

2. Rewrite the following expressions with improved readability

a. age < 18 && height < 48 || age > 60 && height > 72

b. char name value

c. char $name

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

Char name[100]

Char = ‘I’

3. Predict the value of a after each statement.

int main(void)

{

int i = 10; 🡪 i=10

char a = 'd';🡪 a=d

a += 10; 🡪 a= 45

a \*= 5; 🡪a = 125

a /= 4; 🡪a = 31.25

a %= 2;🡪 a= 1

a \*= a + i; 🡪 11

return 0;

}

4. Consider a = 12, b = 3, predict the output of the following .

a. (a>100) && (b<10)

b. (a==4) && (b==2)

c. (a==11) && (a++)

A: outputs

False

False

False

5. Consider a = 10, b = 11, predict the output of the following .

a. (a>10) || (b<10) – False

b. a || 12.12 🡪 true

c. a || b 🡪 true

d. !(a > 5)🡪 true

6. Consider int age = 10, height = 45, year = 2000; Predict the output of the following.

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

b. (year % 4 == 0 && year % 100 != 0 ) || (year % 400 == 0);

A : output

True

True