**Operators Associativity and Precedence Assignment**

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

a. x = 34 + 12/4 – 56

answer:x=34+3-56

x=-19

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

answer:12+3-2

3+1

13<4

false

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

answer:3+2=5

2+5=7

7+10=70

Output=70

d. 34 + 12/4 – 45

answer:12/4=3

34+3-45=-8

Output=-8

2. Rewrite the following expressions with improved readability

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

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

b. char name value

ans:char name\_value;

c. char $name

ans:char name:

3. Predict the value of a after each statement.

Answer: answer in the comment line

int main(void)

{

int i = 10;//i=10

char a = 'd';//a=100

a += 10;//a=110

a \*= 5;//a=550

a /= 4;//a=137

a %= 2;//a=1

a \*= a + i;//a=11

return 0;

}

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

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

answer=false

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

answer=false

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

answer=false

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

a. (a>10) || (b<10)

ans:false

b. a || 12.12

ans:true

c. a || b

ans:true

d. !(a > 5)

ans:false

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

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

answer:true

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

answer:true