Practice sheet of operators 2

Q1. Define the terms associativity and precedence.
Ans 1: The precedence of operators determines which operator is executed first if there is more than one operator in an expression.

The associativity of operators determines the direction in which an expression is evaluated.

Ques 2: If a=50, b=10 and c=20, evaluate the following complex expression:
c+= (a>0 && a<=10) ? ++a: a/b;
Ans: 51

Question 3: Identify the wrong expression from the following expressions and find the values of the correct expressions, if i=4, j=2, k=6, a=2 and n=8.
i.) p= ++-k; ii.) a= - ++k/2; iii.) m=++i- -k;
iv.) a= 2b++; v.) - -n++

Ans: Wrong expression: i) p=++-k; and iv) a= 2b++; and v) --n++
Values of correct expressions:
ii)-3
iii) 11

Q4. In the following expression write the hierarchy of computation and also mention the type of operator: a*x*x+b*c/d>=x&&z!=15.0
Ans: Multiply(*), Divide(/), Binary addition(+), Greater thatn equal to(>=), Not equal to(!=),Logical and(&&)

What will be the output of following program? (Q 5-9)

Q5.
```
#include<stdio.h>
void main()
{
int a=2, b=10, k, c;
k=! ((a<2) && b>2));
printf("%d\n",k);
c= (b<a || b>a);
printf("%d",c);
}
```
Ans: Output: ERROR because in 5th line a bracket is mising before 'b'

Q6.
```
#include<stdio.h>
void main()
{
int b,k=8;
b=(k++-k++-k--,k++);
printf("%d",b);
}
```
Ans: Output: 09

Q7.
```
#include<stdio.h>
int main()
{
int a = 2,b = 5;
a = a^b;
b = b^a;
printf("%d %d",a,b);
return 0;
```

}
Ans: output: 7 2

Q8.#include <stdio.h>
void main()
{
int x = 1, y = 0, z = 5;
int a = x && y || z++;
printf("%d", z);
}
Ans: output : 6

Q9. #include <stdio.h>
void main()
{
int x = 1, y = 0, z = 5;
int a = x && y && z++;
printf("%d", z);
}
Ans: output: 5