1. Write a program to check if a person is eligible to vote. A person is eligible to vote if their age is 18 or older. Additionally, check if the age is above 60, and print that the person is a senior citizen eligible to vote.

Example:

Input: 65

Output:

You are eligible to vote.

You are a senior citizen.

Answer:

```cpp
#include <iostream>
using namespace std;
int main() {
int age;      // Input age from the user
cout << "Enter your age: ";
cin >> age;
  if (age >= 18)  // Check voting eligibility
   {
     cout << "You are eligible to vote." << endl;
     if (age > 60)  // Check if the person is a senior citizen
        cout << "You are a senior citizen eligible to vote." << endl;
   }
 else
     cout << "You are not eligible to vote." << endl;

  return 0;
}
```

2. Write a program that ask the user to enter the item number and prints the price of this item according to the following :

No 1 price 100,

NO 2 price 200,

No 3 price 300,

No 4 price 400

Answer:

```cpp
#include <iostream>
using namespace std;
int main() {
```

```cpp
int itemNumber;
cout << "Enter the item number (1 to 4): ";
cin >> itemNumber;
if (itemNumber >= 1 && itemNumber <= 4)
 {
   if (itemNumber == 1)
      cout << "The price of item 1 is 100." << endl;
    else if (itemNumber == 2)
      cout << "The price of item 2 is 200." << endl;
   else if (itemNumber == 3)
      cout << "The price of item 3 is 300." << endl;
   else if (itemNumber == 4)
      cout << "The price of item 4 is 400." << endl;
 }
else
    cout << "Invalid item number. Please enter a number between 1 and 4." << endl;

   return 0;
}
```

3. What is the output of the following code?

```cpp
int a = 10;

int b = 20;

cout << (a > b ? a : b);
```

a) 10
b) 20
c) 30
d) Error

4. What is the output of the following code?

```cpp
int num = 6;

if (num % 2 == 0) {

  if (num % 3 == 0)

    cout << "Divisible by 2 and 3";

  else
```

```
    cout << "Divisible by 2 only";

} else {

    cout << "Not divisible by 2";

}
```

a)Divisible by 2 and 3
b) Divisible by 2 only
c) Not divisible by 2
d) Error

4. What is the output of the following code?

```
int x = 7;

if (x > 5)

    if (x < 10)

        cout << "x is between 5 and 10";

    else

        cout << "x is greater than or equal to 10";

else

    cout << "x is less than or equal to 5";
```

a)x is between 5 and 10
b) x is greater than or equal to 10
c) x is less than or equal to 5
d) Error

Evaluate the following C++ expressions:

Expression	Evaluation
x + z * y / w where x =2, y=3, z = - 4, and w=5.	x + 2 * 3 / w x + 6 / 5= 2+1=3

k - = n + 7 where k=11 and n = - 4.	k -= -4 + 7 k - = 3 k=11-3=8

y = x++ + y;
z = ++x + y++;
 	
where z = 5, y = 10, x =4.
 	
Assume z, y, and x are integer data type.
	y = x++ + y;
	y = 4++ + 10=14
	z = ++x + y++;
	
	z = ++4 + 10++;
	
	z = 5 + 10++=15