**Variable Scope and Storage Specifier Assignments**

1. **Refer the code snippet below and answer the queries**A screenshot of a computer program

   Description automatically generated
2. **What is the change required if val declaration line below is to be moved to an other file.**

**A) the current code, val is a global variable that is declared in the same file as the function. If you want to move the declaration of val to another file, you will need to do the following:**

**In the file where val is declared (say file1.c):  
The variable should be declared with the extern keyword to indicate that its actual definition will be in another file. So, you should modify the declaration of val like this:**

**extern int val;**

1. **What is the value of x after the for loop execution**

**A)The value** **of x after the for loop execution.**

**c. What does the keyword static in following lines?**

**A) static int function():**

**The keyword static when applied to a function means that the function is only visible within the file in which it is defined. It limits the scope of the function to the current file, making it inaccessible from other files, even if the function's name is referenced externally.**

**static int j = 20;**

**The keyword static when applied to a variable inside a function means that the variable retains**

**its value between function calls.**

1. **What is the value of j after for loop execution?**

**A)So, the value of j after the loop execution will be 23.**

1. **Identify the variables which would be in the stack of function()**

A)**\*The inner x (declared inside the loop).**

**\*The loop counter i.**

**f. What does extern in the following line mean?**

**A)extern void display();**

**The extern keyword here indicates that the function display() is declared, but its definition is**

**provided in another file.**