

O.3

Declare variable within different code blocks (enclosed by curly braces) and test their accessibility within and outside those blocks.

```
#include <stdio.h>
int main () {
    int x = 10;
    printf ("In main block x = %.d/n", x);
}

{
    int y = 20;
    printf ("In inner block x = %.d , y = %.d/n", x, y);
}

{
    int z = 30;
    printf ("In nested block ; x = %.d , y = %.d , z = %.d/n",
           x, y, z);
}

}
return 0;
```

Teacher's Signature

main.c

The screenshot shows a Mac OS X desktop with a terminal window open. The terminal window has tabs for 'main.c' and 'Output'. The 'main.c' tab contains C code demonstrating nested scopes. The 'Output' tab shows the execution results. The desktop dock at the bottom features various Apple applications like Mail, Calendar, and Safari.

```
2
3 int main() {
4     int x = 10;
5
6     printf("In main block x = %d\n", x);
7
8     {
9         int y = 20;
10
11        printf("In inner block x = %d, y = %d\n", x, y);
12
13    {
14        int z = 30;
15
16        printf("In nested block x = %d, y = %d, z = %d\n", x,
17               y, z);
18    }
19
20 // Trying to access 'z' here would cause a compilation
21 // error.
22
23 // Trying to access 'y' here would cause a compilation error.
24
25 }
```

In main block x = 10
In inner block x = 10, y = 20
In nested block x = 10, y = 20, z = 30
== Code Execution Successful ==