

Please read the questions carefully. Make your answers brief and to the point. Part I & II are to be completed without a computer. Part III requires a computer.

Part I: (True/False, if false provide a short explanation... 20 points)

- F 1. C++ considers the variables `userval` and `userVal` to be the same.
↳ C++ is case sensitive.
- F 2. C++ global variables are declared on the first line in the main function.
↳ Global variables are declared outside the main.
- F 3. C++ lines of code must be numbered.
Lines end in semi-colons ";"
- F 4. The modulus operator `%` acts on int data types and gives a percentage.
The modulus operator returns the remainder.
- F 5. This function prototype declares a function with 2 output parameters:
`double pow(double base, double exponent)`
This function declares 2 INPUT parameters.
- F 6. C++ if statement without braces `{ }` is a syntax error. For example:

```
if(x == 5)
    cout << "hello" << endl;
    cout << "world" << endl;
```

No error, just the first line occurs under the condition.
- F 7. The condition `(a < 3 && b > 2)` if `a = -10` and `b = 1`.
Both must be true where `b > 2` is False.
- F 8. The code in the body of a while loop will execute at least once.
The precondition must be met first.
- F 9. A do loop inside another do loop is an example of recursion.
Functions calling itself is recursion.
- T 10. The following code is an infinite loop, that is, never ending.

```
for(int i = 0; i == 10; i+=3){
    cout << "hi" << endl;
}
```