

Mini Quiz 8 Topic List

Mini Quiz 8 covers material from **Labs 1-11**, with emphasis on newer material. The following is a summary of what you should know.

New topics:

- One dimensional arrays
 - How to declare arrays
 - How to refer to elements of arrays (indexing starts at 0!) and use loops to work with them
 - Example:


```
int nums[8];
cout << "Enter 8 numbers: ";
for (int i=0; i<8; i++){
    cin >> nums[i];}    //reads in all 8 numbers
```
 - By default, arrays are passed by reference into functions (it's like the & is there but you don't need to write it)

Topics from previous quizzes:

- Parameters passed by reference (&)
 - Passes the actual location in memory (not just a copy of its value)
 - If the variable is changed in the function, it is changed outside the function also
- Functions
 - Return types (output)
 - When we say a function returns a value, we mean that the return keyword is used
 - Parameters (inputs)
 - When we say a function accepts a parameter, the parameter is passed into the function in the parameter list in the parentheses
 - Passed by value
 - Variables only exist in the function they are declared in
 - Variable types in prototype (declaration) and definition (code) must match
 - Example:


```
// Function prototype
int addFunc (int a, int b);

//main program
int main()
{
    int i, j, k;
    i = 12;
    j = 8;
    k = addFunc(i, j);
    cout << k;
    return 0;
}

//Function
```

```
int addFunc (int a, int b)
{
    int c;
    c = a + b;
    return c;
}
```

- switch cases
- while loops
- do-while loops
- for loops
- Totaler variables
- If-else structures
- Notation for conditional testing
- Variables Types and Operations
- How to use `cin` and `cout` for input and output.
- How to format your output (e.g. putting some information on different lines)

You will complete the quiz **on paper** during class. You will not be allowed to use the computer or any other reference material.