

1

An outline for producing the multiplication table as shown in Malik Ch. 5 is,

1. Set up a iterator that iterates through the first 5 natural numbers, e.g. for i in range 1 to 5.
 - (a) Set another iterator nesting it inside the first iterator. This loops a set number of times for each iteration defined in its scope. e.g. for i in range 1 to 10.
 - (b) Multiply every iteration by the iteration defined in the scope.
 - (c) Display the number using the output buffer.
2. Purge output buffer here, e.g. endl;.

2

A simple example that replaces the break keyword in one example of Ch.5 in Malik (isNegative).

```
int sum = 0;
int num = 0;
while( cin && num > 0)
{
    sum = sum + num;
    cin >> num;
}
```

3

Unit testing can be done by running the compiled program in gdb and testing at various break points and stepping into the functions to check and see if they work within the given semantics.

4

There was repititive code (copy pasted) in a few different sections of the program. This could have been avoided.