## CP1H1 Script, Output, and Pseudocode

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## **Algorithm 1** Powers of 2

- 1: procedure Powers of 2
- 2: Print out first line of the table
- 3: **for** the numbers 0-8 **do**
- 4: Print the number, tab, and print value

## Listing 1: CP1H1 Script

```
2
3
            Filename:
                        CP1H1_MBROD.cpp
            Assignment: C++ Lab #1 Homework 1
            Title: Powers of 2 Calculator
         Description:
                        Displays 2 to the power of 0 through 8
              Version:
                         1.0
10
              Created:
                        11/05/2022
            Revision:
                        none
12
            Compiler:
                        GCC
14
               Author:
                        M. Brodskiy
15
16
17
    */
18
19
  #include <iostream> // Include header file for input/output
20
  #include <cmath> // Include header file for powers
^{21}
22
```

```
using namespace std; // Declare standard namespace use
24
   int main() {
25
26
       // Print first line of table
27
       cout << "Power (P)\tValue of 2^P" << endl;</pre>
28
29
30
       for (int i = 0; i \le 8; i += 1) {// Loop through values 0-8
31
32
            cout << " \quad " << i << " \setminus t \setminus t \qquad " << pow(2,i) << endl;
33
            // Perform math and spacing assignments
34
35
       }
36
37
       return 0; // Return 0 to signify successful exit code
38
39
40
```

Listing 2: CP1H1 Output

```
Power (P)
                      Value of 2^P
                           1
       0
2
       1
                           2
3
       2
                           4
       3
                           8
5
       4
                           16
6
       5
                           32
7
       6
                           64
       7
                           128
9
                           256
10
  Press ENTER or type command to continue
```