

Question: Create python functions for exponentiation, square root, and factorial.

The screenshot shows a code editor interface with a dark theme. At the top, there is a file path: C:\Users\athul\Documents\upcode\python\programs> assessment1.py <...>. Below this is the Python code:

```
1 # 1. Exponentiation
2
3 def exponentiation(base, power):
4     return base ** power
5
6 # 2. Square Root
7
8 def square_root(number):
9     return number** 0.5
10
11 # 3. Factorial
12
13 def factorial(n):
14     if n == 0:
15         return 1
16     return n * factorial(n - 1)
17
18
19 print(exponentiation(2, 3))
20 print(square_root(16))
21 print(factorial(5))
22
```

Below the code, there is a navigation bar with tabs: PROBLEMS, OUTPUT, DEBUG CONSOLE, TERMINAL, and PORTS. The TERMINAL tab is selected. In the terminal window, the command `python assessment1.py` is run, and the output is:

```
PS C:\Users\athul\Documents\upcode\python\programs> python assessment1.py
8
4.0
120
PS C:\Users\athul\Documents\upcode\python\programs>
```