

Homework Quiz - Week 3 Results for Murshed SK

❗ Correct answers are hidden.

Score for this attempt: 10 out of 10

Submitted Dec 19, 2023 at 4:43pm

This attempt took 3 minutes.



Question 1

1 / 1 pts

Which of the following is not a layer of the Quantum Stack?

- ☐ Quantum Algorithms and Protocols
- ☐ Quantum Circuits
- ☐ Quantum Gates
- ☒ Quantum Tunneling
- ☐ Quantum Bits



Question 2

1 / 1 pts

Which of the following best describes a qubit? A qubit is...

- ☒ The fundamental unit of information in a quantum computer.
- ☐ The way we change quantum states.
- ☐ A quantum transistor.
- ☐ A superconducting loop that operates at very cold temperatures.
- ☐

A bit that can store four different quantum states. It is called a qubit because the states 0, 1, superposition, and entangled are each one quarter of the bit.



Question 3

1 / 1 pts

Which of the following best describes why Moore's law is said to be ending?

- ☐ Moore's law is based on transistors, but scientists have begun replacing transistors with new technologies like neuromorphic and bacterial computers.
- ☐ Quantum computers have been shown to be better at all tasks than transistor based computers and so Moore's law needs to be modified.

- ☐ It's largely believed that Moore's law is outdated, so many world governments are looking to get rid of this law.
- ☒ Quantum effects like tunneling cause small enough transistors and, in turn, classical computers to work incorrectly. This means we cannot keep making smaller transistors and therefore more powerful computers.
- ☐ Moore's law was never truly a physical law, instead it was a prediction that turned out to be pretty accurate. So, scientists have begun calling it "Moore's prediction" instead.



Question 4

1 / 1 pts

In problem #1.2, what is the baby's hunger and mood when you print out these attributes?

- ☐ Happy and crying
- ☐ full and crying
- ☒ hungry and crying
- ☐ starving and happy
- ☐ full and sad



Question 5

1 / 1 pts

In Problem #1.4, what is your plant's health?

- ☐ 8/10
- ☐ 1/10
- ☐ 0/10
- ☒ 10/10
- ☐ 5/10



Question 6

1 / 1 pts

In Problem #2.1, after you debug your code, what number is printed out?

- ☒ 51
- ☐ 20
- ☐ 17
- ☐ 21
- ☐ 3



Question 7

1 / 1 pts

In Problem #2.3, after you debug your code, what is your light INITIALLY turned up to?

- ☐ 15
- ☒ 0
- ☐ 10
- ☐ 6
- ☐ 7



Question 8

1 / 1 pts

In Problem #2.3, after you debug your code, what level is your light set to?

- ☐ 15
- ☐ 0
- ☐ 10
- ☒ 6
- ☐ 7



Question 9

1 / 1 pts

In Problem #2.3, after you debug your code what is the wetness of the soil?

- ☐ 10/10
- ☒ 0/10
- ☐ 8.2000000000000001/10
- ☐ 6.035444/10
- ☐ 3.14/10



Question 10

1 / 1 pts

In Problem #2.4, after you debug your code, what is the value of x1 and x2?

- ☐ x1 = -3.0 and x2 = - 3.0
- ☐ x1 = -2.0 and x2 = -7.0
- ☐ x1 = -4.0 and x2 = 3.0

☒ $x_1 = -3.0$ and $x_2 = -5.0$

☐ $x_1 = -9.0$ and $x_2 = -1.0$

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