

Quiz3 - Results



Attempt 1 of 1

Written May 29, 2023 11:34 AM - May 29, 2023 11:49 AM

Attempt Score 6 / 10 - 60 %

Overall Grade (Highest Attempt) 6 / 10 - 60 %

Question 1

1 / 1 point

Write the decimal value of $101101_{(2)}$. The binary number is represented in 2's complement.
(don't use unnecessary spaces in your answer)

Answer: -19 ✓

Question 2

0 / 1 point

What is the value of $11010101_{(2)}$ in decimal, assuming the binary value is stored in a short variable in java?

➡ ☒ 213

✗ ☐ -43

☐ -58

☐ -59

Question 3

1 / 1 point

When you add -20 and 127 using byte variable in java, what happens?

☐ There is a compile error regarding the possible loss of precision.

✓ ☒ There is no error and program works fine.

☐ There is no error but underflow number happens and the result is not what we expect.

☐ There is an overflow problem but Java reports no error. (logical error)

Question 4

0 / 1 point

On a computer which uses 6 bits to represent integers using 2's complement, which of these operations result in overflow?

- ☒ 24 + 8
- ☐ -24 - 8
- ✗ ☐ 2 + 29
- ☐ -2 - 29

Question 5

1 / 1 point

Which of the following statement(s) is/are NOT correct? (choose more than one if applies)

- ✓ ☐ A programming language is used to implement an algorithm.
- ✓ ☒ A programming language is used to represent an algorithm.
- ✓ ☐ Algorithm is a **finite sequence of well-defined, computer-implementable instructions**, typically to solve a class of problems or to perform a computation.
- ✓ ☒ Flowchart and pseudocode are the only ways of representing an algorithm.

Question 6

0 / 2 points

What is the decimal value of $1100111.1001_{(2)}$? (don't mention the base in your answer)

Answer: 103. ✗ (103.5625)

Question 7

1 / 1 point

Which of the following number is not a valid number?

- ☐ 00101011(2)
- ☐ FADE(16)
- ☐ 678(9)
- ✓ ☒ ACE(14)

Question 8

2 / 2 points

What is the binary value of 104.625? (Write your answer without any leading zero's)

Answer: 1101000.101

Done