* **Question 1**

0 out of 1 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | The AND operator is also known as the BOOLEAN \_\_\_ because the truth table can be developed by multiplying the two inputs. |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | Incorrect & | | Correct Answer: |  |  |  |  |  | | --- | --- | --- | | **Evaluation Method** | **Correct Answer** | **Case Sensitivity** | | Correct*Exact Match* | product |  | | Correct*Exact Match* | Product |  | | Correct*Exact Match* | PRODUCT |  |  |  | | --- | |  | |  |  |  |

* **Question 2**

0 out of 1 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | The status bits that are used to detect overflow of arithmetic functions are: |  |  |  |
| |  |  | | --- | --- | | Selected Answers: | Correct   V | | Answers: | Correct   V | |  | Z | |  | Correct   C | |  | N | |  |  |  |

* **Question 3**

0 out of 1 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | Using 9-bit two's complement representation, convert 13510 to binary: **[x]** then perform an ASL operation on it: **[y]** (no spaces please) |  |  |  |
| |  |  | | --- | --- | | Specified Answer for: x | Incorrect10000111 | | Specified Answer for: y | Incorrect01111000 |  |  | | --- | | **Correct Answers for: x** |  |  |  |  | | --- | --- | --- | | **Evaluation Method** | **Correct Answer** | **Case Sensitivity** | | Correct*Exact Match* | 010000111 |  |  |  | | --- | | **Correct Answers for: y** |  |  |  |  | | --- | --- | --- | | **Evaluation Method** | **Correct Answer** | **Case Sensitivity** | | Correct*Exact Match* | 100001110 |  | |  |  |  |

* **Question 4**

1 out of 1 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | Which arithmetic operation multiplies an integer by 2? |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | Correct   ASL | | Answers: | ROL | |  | ASR | |  | Correct   ASL | |  | ROR | |  |  |  |

* **Question 5**

0 out of 1 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | Which of these arithmetic operations affects the Carry status bit? |  |  |  |
| |  |  | | --- | --- | |  | Incorrect   AND | | Answers: | Correct   ASL | |  | NOT | |  | AND | |  | Correct   ROR | |  |  |  |

* **Question 6**

0 out of 1 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | Which of these is NOT a computer character representation? |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | Incorrect   EBCIDC | | Answers: | BCD | |  | Correct   IEEE754 | |  | EBCIDC | |  | ASCII | |  |  |  |

* **Question 7**

0 out of 1 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | Using the signed magnitude 14-bit model from the lecture, what is the binary representation for negative infinity? (no spaces please) |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | Incorrect 1000 | | Correct Answer: |  |  |  |  |  | | --- | --- | --- | | **Evaluation Method** | **Correct Answer** | **Case Sensitivity** | | Correct*Exact Match* | 11111100000000 |  |  |  | | --- | |  | |  |  |  |

* **Question 8**

0 out of 1 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | The OR operator is also known as the BOOLEAN \_\_\_\_\_ because the truth table can be developed by adding the inputs. |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | Incorrect || | | Correct Answer: |  |  |  |  |  | | --- | --- | --- | | **Evaluation Method** | **Correct Answer** | **Case Sensitivity** | | Correct*Exact Match* | sum |  | | Correct*Exact Match* | Sum |  | | Correct*Exact Match* | SUM |  |  |  | | --- | |  | |  |  |  |

* **Question 9**

0 out of 1 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | Which arithmetic operation divides an integer by 2? |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | Incorrect   ROR | | Answers: | ROL | |  | ROR | |  | ASL | |  | Correct   ASR | |  |  |  |

* **Question 10**

0 out of 1 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | Using 9-bit two's complement representation, convert -6210 to binary: **[x]** then perform ASR operation on it: **[y]** (no spaces please) |  |  |  |
| |  |  | | --- | --- | | Specified Answer for: x | Incorrect00111110 | | Specified Answer for: y | Incorrect11000001 |  |  | | --- | | **Correct Answers for: x** |  |  |  |  | | --- | --- | --- | | **Evaluation Method** | **Correct Answer** | **Case Sensitivity** | | Correct*Exact Match* | 111000010 |  |  |  | | --- | | **Correct Answers for: y** |  |  |  |  | | --- | --- | --- | | **Evaluation Method** | **Correct Answer** | **Case Sensitivity** | | Correct*Exact Match* | 111100001 |  | |  |  |  |

* **Question 11**

0.2 out of 1 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | Match these terms for Signed Magnitude Number representation |  |  |  |
| |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | Question | Correct Match | Selected Match | | Sign bit | Correct E.   0 or 1 representing positive or negative | Incorrect B.   first non-zero digit is written to the left of the radix point | | Significand | Correct A.   determines the precision or significant digits of the number representation | Correct A.   determines the precision or significant digits of the number representation | | Exponent | Correct D.   determines the range of the number representation - smallest & largest | Incorrect E.   0 or 1 representing positive or negative | | Bias | Correct C.   allows negative and positive exponents | Incorrect D.   determines the range of the number representation - smallest & largest | | Normalization | Correct B.   first non-zero digit is written to the left of the radix point | Incorrect C.   allows negative and positive exponents |  |  | | --- | | All Answer Choices | | A.   determines the precision or significant digits of the number representation | | B.   first non-zero digit is written to the left of the radix point | | C.   allows negative and positive exponents | | D.   determines the range of the number representation - smallest & largest | | E.   0 or 1 representing positive or negative | | |  |  |  |

* **Question 12**

0 out of 1 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | In C++, what variable TYPE is defined by IEEE 754 double precision? |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | Incorrect 8 | | Correct Answer: |  |  |  |  |  | | --- | --- | --- | | **Evaluation Method** | **Correct Answer** | **Case Sensitivity** | | Correct*Exact Match* | double |  | | Correct*Exact Match* | Double |  | | Correct*Exact Match* | DOUBLE |  |  |  | | --- | |  | |  |  |  |

* **Question 13**

1 out of 1 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | Binary representations of integers within the range of the representation are exact equivalents of the base ten numbers. |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | Correct True | | Answers: | Correct True | |  | False | |  |  |  |

* **Question 14**

0 out of 1 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | Using the 14-bit model in the Floating Point Lecture, what is the Signed Magnitude Representation -normalized & biased for -14 (no spaces please) |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | Incorrect 0 | | Correct Answer: |  |  |  |  |  | | --- | --- | --- | | **Evaluation Method** | **Correct Answer** | **Case Sensitivity** | | Correct*Exact Match* | 11001011000000 |  |  |  | | --- | |  | |  |  |  |

* **Question 15**

1 out of 1 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | Binary representations of floating point numbers within the range of the representation are exact equivalents of the base ten numbers. |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | Correct False | | Answers: | True | |  | Correct False | |  |  |  |

* **Question 1**

0 out of 1 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | In decimal - this has a decimal point 10.35 In binary - this has a **[x]** point 100.101 |  |  |  |
| |  |  | | --- | --- | | Specified Answer for: x | Incorrect[None Given] |  |  | | --- | | **Correct Answers for: x** |  |  |  |  | | --- | --- | --- | | **Evaluation Method** | **Correct Answer** | **Case Sensitivity** | | Correct*Exact Match* | binary |  | | Correct*Exact Match* | Binary |  | | Correct*Exact Match* | BINARY |  | | Correct*Exact Match* | radix |  | | Correct*Exact Match* | Radix |  | | Correct*Exact Match* | RADIX |  | |  |  |  |

* **Question 2**

1 out of 1 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | The OR operator is also known as the BOOLEAN \_\_\_\_\_ because the truth table can be developed by adding the inputs. |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | Correct sum | | Correct Answer: |  |  |  |  |  | | --- | --- | --- | | **Evaluation Method** | **Correct Answer** | **Case Sensitivity** | | Correct*Exact Match* | sum |  | | Correct*Exact Match* | Sum |  | | Correct*Exact Match* | SUM |  |  |  | | --- | |  | |  |  |  |

* **Question 3**

0 out of 1 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | The status bits that are used to detect overflow of arithmetic functions are: |  |  |  |
| |  |  | | --- | --- | | Selected Answers: | Correct   V | | Answers: | Correct   V | |  | N | |  | Correct   C | |  | Z | |  |  |  |

* **Question 4**

1 out of 1 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | Match these terms for Signed Magnitude Number representation |  |  |  |
| |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | Question | Correct Match | Selected Match | | Sign bit | Correct A.   0 or 1 representing positive or negative | Correct A.   0 or 1 representing positive or negative | | Significand | Correct E.   determines the precision or significant digits of the number representation | Correct E.   determines the precision or significant digits of the number representation | | Exponent | Correct B.   determines the range of the number representation - smallest & largest | Correct B.   determines the range of the number representation - smallest & largest | | Bias | Correct C.   allows negative and positive exponents | Correct C.   allows negative and positive exponents | | Normalization | Correct D.   first non-zero digit is written to the left of the radix point | Correct D.   first non-zero digit is written to the left of the radix point |  |  | | --- | | All Answer Choices | | A.   0 or 1 representing positive or negative | | B.   determines the range of the number representation - smallest & largest | | C.   allows negative and positive exponents | | D.   first non-zero digit is written to the left of the radix point | | E.   determines the precision or significant digits of the number representation | | |  |  |  |

* **Question 5**

1 out of 1 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | Using 9-bit two's complement representation, convert -6210 to binary: **[x]** then perform ASR operation on it: **[y]** (no spaces please) |  |  |  |
| |  |  | | --- | --- | | Specified Answer for: x | Correct111000010 | | Specified Answer for: y | Correct111100001 |  |  | | --- | | **Correct Answers for: x** |  |  |  |  | | --- | --- | --- | | **Evaluation Method** | **Correct Answer** | **Case Sensitivity** | | Correct*Exact Match* | 111000010 |  |  |  | | --- | | **Correct Answers for: y** |  |  |  |  | | --- | --- | --- | | **Evaluation Method** | **Correct Answer** | **Case Sensitivity** | | Correct*Exact Match* | 111100001 |  | |  |  |  |

* **Question 6**

1 out of 1 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | Binary representations of floating point numbers within the range of the representation are exact equivalents of the base ten numbers. |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | Correct False | | Answers: | True | |  | Correct False | |  |  |  |

* **Question 7**

1 out of 1 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | Binary representations of integers within the range of the representation are exact equivalents of the base ten numbers. |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | Correct True | | Answers: | Correct True | |  | False | |  |  |  |

* **Question 8**

0.5 out of 1 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | Using 9-bit two's complement representation, convert 13510 to binary: **[x]** then perform an ASL operation on it: **[y]** (no spaces please) |  |  |  |
| |  |  | | --- | --- | | Specified Answer for: x | Incorrect111100001 | | Specified Answer for: y | Correct100001110 |  |  | | --- | | **Correct Answers for: x** |  |  |  |  | | --- | --- | --- | | **Evaluation Method** | **Correct Answer** | **Case Sensitivity** | | Correct*Exact Match* | 010000111 |  |  |  | | --- | | **Correct Answers for: y** |  |  |  |  | | --- | --- | --- | | **Evaluation Method** | **Correct Answer** | **Case Sensitivity** | | Correct*Exact Match* | 100001110 |  | |  |  |  |

* **Question 9**

0 out of 1 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | In C++, what variable TYPE is defined by IEEE 754 single precision? |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | Incorrect single | | Correct Answer: |  |  |  |  |  | | --- | --- | --- | | **Evaluation Method** | **Correct Answer** | **Case Sensitivity** | | Correct*Exact Match* | float |  | | Correct*Exact Match* | Float |  | | Correct*Exact Match* | FLOAT |  |  |  | | --- | |  | |  |  |  |

* **Question 10**

1 out of 1 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | Using the signed magnitude 14-bit model from the lecture, what is the binary representation for negative infinity? (no spaces please) |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | Correct 11111100000000 | | Correct Answer: |  |  |  |  |  | | --- | --- | --- | | **Evaluation Method** | **Correct Answer** | **Case Sensitivity** | | Correct*Exact Match* | 11111100000000 |  |  |  | | --- | |  | |  |  |  |

* **Question 11**

1 out of 1 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | Which of these arithmetic operations affects the Carry status bit? |  |  |  |
| |  |  | | --- | --- | |  | Correct   ASL | |  | Correct   ROR | | Answers: | NOT | |  | AND | |  | Correct   ASL | |  | Correct   ROR | |  |  |  |

* **Question 12**

1 out of 1 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | Which arithmetic operation divides an integer by 2? |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | Correct   ASR | | Answers: | ROR | |  | ROL | |  | ASL | |  | Correct   ASR | |  |  |  |

* **Question 13**

1 out of 1 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | Which of these is NOT a computer character representation? |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | Correct   IEEE754 | | Answers: | BCD | |  | Correct   IEEE754 | |  | EBCIDC | |  | ASCII | |  |  |  |

* **Question 14**

1 out of 1 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | In C++, what variable TYPE is defined by IEEE 754 double precision? |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | Correct double | | Correct Answer: |  |  |  |  |  | | --- | --- | --- | | **Evaluation Method** | **Correct Answer** | **Case Sensitivity** | | Correct*Exact Match* | double |  | | Correct*Exact Match* | Double |  | | Correct*Exact Match* | DOUBLE |  |  |  | | --- | |  | |  |  |  |

* **Question 15**

1 out of 1 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | What does NAN stand for? **[x]** **[y]** **[z]** |  |  |  |
| |  |  | | --- | --- | | Specified Answer for: x | Correctnot | | Specified Answer for: y | Correcta | | Specified Answer for: z | Correctnumber |  |  | | --- | | **Correct Answers for: x** |  |  |  |  | | --- | --- | --- | | **Evaluation Method** | **Correct Answer** | **Case Sensitivity** | | Correct*Exact Match* | not |  | | Correct*Exact Match* | Not |  | | Correct*Exact Match* | NOT |  |  |  | | --- | | **Correct Answers for: y** |  |  |  |  | | --- | --- | --- | | **Evaluation Method** | **Correct Answer** | **Case Sensitivity** | | Correct*Exact Match* | a |  | | Correct*Exact Match* | A |  | | Correct*Exact Match* | A |  |  |  | | --- | | **Correct Answers for: z** |  |  |  |  | | --- | --- | --- | | **Evaluation Method** | **Correct Answer** | **Case Sensitivity** | | Correct*Exact Match* | number |  | | Correct*Exact Match* | Number |  | | Correct*Exact Match* | NUMBER |  | |  |  |  |

* **Question 1**

1 out of 1 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | Binary representations of floating point numbers within the range of the representation are exact equivalents of the base ten numbers. |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | Correct False | | Answers: | True | |  | Correct False | |  |  |  |

* **Question 2**

1 out of 1 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | The AND operator is also known as the BOOLEAN \_\_\_ because the truth table can be developed by multiplying the two inputs. |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | Correct product | | Correct Answer: |  |  |  |  |  | | --- | --- | --- | | **Evaluation Method** | **Correct Answer** | **Case Sensitivity** | | Correct*Exact Match* | product |  | | Correct*Exact Match* | Product |  | | Correct*Exact Match* | PRODUCT |  |  |  | | --- | |  | |  |  |  |

* **Question 3**

1 out of 1 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | Using 9-bit two's complement representation, convert -6210 to binary: **[x]** then perform ASR operation on it: **[y]** (no spaces please) |  |  |  |
| |  |  | | --- | --- | | Specified Answer for: x | Correct111000010 | | Specified Answer for: y | Correct111100001 |  |  | | --- | | **Correct Answers for: x** |  |  |  |  | | --- | --- | --- | | **Evaluation Method** | **Correct Answer** | **Case Sensitivity** | | Correct*Exact Match* | 111000010 |  |  |  | | --- | | **Correct Answers for: y** |  |  |  |  | | --- | --- | --- | | **Evaluation Method** | **Correct Answer** | **Case Sensitivity** | | Correct*Exact Match* | 111100001 |  | |  |  |  |

* **Question 4**

1 out of 1 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | Using the signed magnitude 14-bit model from the lecture, what is the binary representation for negative infinity? (no spaces please) |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | Correct 11111100000000 | | Correct Answer: |  |  |  |  |  | | --- | --- | --- | | **Evaluation Method** | **Correct Answer** | **Case Sensitivity** | | Correct*Exact Match* | 11111100000000 |  |  |  | | --- | |  | |  |  |  |

* **Question 5**

1 out of 1 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | Which of these is NOT a computer character representation? |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | Correct   IEEE754 | | Answers: | BCD | |  | ASCII | |  | Correct   IEEE754 | |  | EBCIDC | |  |  |  |

* **Question 6**

1 out of 1 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | Match these terms for Signed Magnitude Number representation |  |  |  |
| |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | Question | Correct Match | Selected Match | | Sign bit | Correct B.   0 or 1 representing positive or negative | Correct B.   0 or 1 representing positive or negative | | Significand | Correct E.   determines the precision or significant digits of the number representation | Correct E.   determines the precision or significant digits of the number representation | | Exponent | Correct A.   determines the range of the number representation - smallest & largest | Correct A.   determines the range of the number representation - smallest & largest | | Bias | Correct D.   allows negative and positive exponents | Correct D.   allows negative and positive exponents | | Normalization | Correct C.   first non-zero digit is written to the left of the radix point | Correct C.   first non-zero digit is written to the left of the radix point |  |  | | --- | | All Answer Choices | | A.   determines the range of the number representation - smallest & largest | | B.   0 or 1 representing positive or negative | | C.   first non-zero digit is written to the left of the radix point | | D.   allows negative and positive exponents | | E.   determines the precision or significant digits of the number representation | | |  |  |  |

* **Question 7**

0 out of 1 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | The status bits that are used to detect overflow of arithmetic functions are: |  |  |  |
| |  |  | | --- | --- | |  | Correct   V | | Answers: | Z | |  | Correct   C | |  | Correct   V | |  | N | |  |  |  |

* **Question 8**

1 out of 1 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | Which of these arithmetic operations affects the Carry status bit? |  |  |  |
| |  |  | | --- | --- | | Selected Answers: | Correct   ROR | |  | Correct   ASL | | Answers: | Correct   ROR | |  | NOT | |  | Correct   ASL | |  | AND | |  |  |  |

* **Question 9**

1 out of 1 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | In decimal - this has a decimal point 10.35 In binary - this has a **[x]** point 100.101 |  |  |  |
| |  |  | | --- | --- | | Specified Answer for: x | Correctbinary |  |  | | --- | | **Correct Answers for: x** |  |  |  |  | | --- | --- | --- | | **Evaluation Method** | **Correct Answer** | **Case Sensitivity** | | Correct*Exact Match* | binary |  | | Correct*Exact Match* | Binary |  | | Correct*Exact Match* | BINARY |  | | Correct*Exact Match* | radix |  | | Correct*Exact Match* | Radix |  | | Correct*Exact Match* | RADIX |  | |  |  |  |

* **Question 10**

1 out of 1 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | What does NAN stand for? **[x]** **[y]** **[z]** |  |  |  |
| |  |  | | --- | --- | | Specified Answer for: x | Correctnot | | Specified Answer for: y | Correcta | | Specified Answer for: z | Correctnumber |  |  | | --- | | **Correct Answers for: x** |  |  |  |  | | --- | --- | --- | | **Evaluation Method** | **Correct Answer** | **Case Sensitivity** | | Correct*Exact Match* | not |  | | Correct*Exact Match* | Not |  | | Correct*Exact Match* | NOT |  |  |  | | --- | | **Correct Answers for: y** |  |  |  |  | | --- | --- | --- | | **Evaluation Method** | **Correct Answer** | **Case Sensitivity** | | Correct*Exact Match* | a |  | | Correct*Exact Match* | A |  | | Correct*Exact Match* | A |  |  |  | | --- | | **Correct Answers for: z** |  |  |  |  | | --- | --- | --- | | **Evaluation Method** | **Correct Answer** | **Case Sensitivity** | | Correct*Exact Match* | number |  | | Correct*Exact Match* | Number |  | | Correct*Exact Match* | NUMBER |  | |  |  |  |

* **Question 11**

0 out of 1 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | Using the 14-bit model in the Floating Point Lecture, what is the Signed Magnitude Representation -normalized & biased for -14 (no spaces please) |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | Incorrect [None Given] | | Correct Answer: |  |  |  |  |  | | --- | --- | --- | | **Evaluation Method** | **Correct Answer** | **Case Sensitivity** | | Correct*Exact Match* | 11001011000000 |  |  |  | | --- | |  | |  |  |  |

* **Question 12**

1 out of 1 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | Using 9-bit two's complement representation, convert 13510 to binary: **[x]** then perform an ASL operation on it: **[y]** (no spaces please) |  |  |  |
| |  |  | | --- | --- | | Specified Answer for: x | Correct010000111 | | Specified Answer for: y | Correct100001110 |  |  | | --- | | **Correct Answers for: x** |  |  |  |  | | --- | --- | --- | | **Evaluation Method** | **Correct Answer** | **Case Sensitivity** | | Correct*Exact Match* | 010000111 |  |  |  | | --- | | **Correct Answers for: y** |  |  |  |  | | --- | --- | --- | | **Evaluation Method** | **Correct Answer** | **Case Sensitivity** | | Correct*Exact Match* | 100001110 |  | |  |  |  |

* **Question 13**

1 out of 1 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | The OR operator is also known as the BOOLEAN \_\_\_\_\_ because the truth table can be developed by adding the inputs. |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | Correct sum | | Correct Answer: |  |  |  |  |  | | --- | --- | --- | | **Evaluation Method** | **Correct Answer** | **Case Sensitivity** | | Correct*Exact Match* | sum |  | | Correct*Exact Match* | Sum |  | | Correct*Exact Match* | SUM |  |  |  | | --- | |  | |  |  |  |

* **Question 14**

1 out of 1 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | In C++, what variable TYPE is defined by IEEE 754 double precision? |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | Correct double | | Correct Answer: |  |  |  |  |  | | --- | --- | --- | | **Evaluation Method** | **Correct Answer** | **Case Sensitivity** | | Correct*Exact Match* | double |  | | Correct*Exact Match* | Double |  | | Correct*Exact Match* | DOUBLE |  |  |  | | --- | |  | |  |  |  |

* **Question 15**

0 out of 1 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | What are the names for these status bits? N **[w]** Z **[x]** V **[y]** C **[z]** |  |  |  |
| |  |  | | --- | --- | | Specified Answer for: w | Incorrect[None Given] | | Specified Answer for: x | Incorrect[None Given] | | Specified Answer for: y | Incorrect[None Given] | | Specified Answer for: z | Incorrect[None Given] |  |  | | --- | | **Correct Answers for: w** |  |  |  |  | | --- | --- | --- | | **Evaluation Method** | **Correct Answer** | **Case Sensitivity** | | Correct*Exact Match* | negative |  | | Correct*Exact Match* | Negative |  | | Correct*Exact Match* | NEGATIVE |  |  |  | | --- | | **Correct Answers for: x** |  |  |  |  | | --- | --- | --- | | **Evaluation Method** | **Correct Answer** | **Case Sensitivity** | | Correct*Exact Match* | zero |  | | Correct*Exact Match* | Zero |  | | Correct*Exact Match* | ZERO |  |  |  | | --- | | **Correct Answers for: y** |  |  |  |  | | --- | --- | --- | | **Evaluation Method** | **Correct Answer** | **Case Sensitivity** | | Correct*Exact Match* | overflow |  | | Correct*Exact Match* | Overflow |  | | Correct*Exact Match* | OVERFLOW |  |  |  | | --- | | **Correct Answers for: z** |  |  |  |  | | --- | --- | --- | | **Evaluation Method** | **Correct Answer** | **Case Sensitivity** | | Correct*Exact Match* | carry |  | | Correct*Exact Match* | Carry |  | | Correct*Exact Match* | CARRY |  | |  |  |  |

* **Question 1**

0 out of 1 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | Which arithmetic operation multiplies an integer by 2? |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | Incorrect   ASR | | Answers: | Correct   ASL | |  | ROL | |  | ROR | |  | ASR | |  |  |  |

* **Question 2**

1 out of 1 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | Binary representations of integers within the range of the representation are exact equivalents of the base ten numbers. |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | Correct True | | Answers: | Correct True | |  | False | |  |  |  |

* **Question 3**

1 out of 1 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | In decimal - this has a decimal point 10.35 In binary - this has a **[x]** point 100.101 |  |  |  |
| |  |  | | --- | --- | | Specified Answer for: x | Correctradix |  |  | | --- | | **Correct Answers for: x** |  |  |  |  | | --- | --- | --- | | **Evaluation Method** | **Correct Answer** | **Case Sensitivity** | | Correct*Exact Match* | binary |  | | Correct*Exact Match* | Binary |  | | Correct*Exact Match* | BINARY |  | | Correct*Exact Match* | radix |  | | Correct*Exact Match* | Radix |  | | Correct*Exact Match* | RADIX |  | |  |  |  |

* **Question 4**

1 out of 1 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | In C++, what variable TYPE is defined by IEEE 754 single precision? |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | Correct float | | Correct Answer: |  |  |  |  |  | | --- | --- | --- | | **Evaluation Method** | **Correct Answer** | **Case Sensitivity** | | Correct*Exact Match* | float |  | | Correct*Exact Match* | Float |  | | Correct*Exact Match* | FLOAT |  |  |  | | --- | |  | |  |  |  |

* **Question 5**

1 out of 1 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | Match these terms for Signed Magnitude Number representation |  |  |  |
| |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | Question | Correct Match | Selected Match | | Sign bit | Correct E.   0 or 1 representing positive or negative | Correct E.   0 or 1 representing positive or negative | | Significand | Correct C.   determines the precision or significant digits of the number representation | Correct C.   determines the precision or significant digits of the number representation | | Exponent | Correct D.   determines the range of the number representation - smallest & largest | Correct D.   determines the range of the number representation - smallest & largest | | Bias | Correct A.   allows negative and positive exponents | Correct A.   allows negative and positive exponents | | Normalization | Correct B.   first non-zero digit is written to the left of the radix point | Correct B.   first non-zero digit is written to the left of the radix point |  |  | | --- | | All Answer Choices | | A.   allows negative and positive exponents | | B.   first non-zero digit is written to the left of the radix point | | C.   determines the precision or significant digits of the number representation | | D.   determines the range of the number representation - smallest & largest | | E.   0 or 1 representing positive or negative | | |  |  |  |

* **Question 6**

1 out of 1 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | Using the 14-bit model in the Floating Point Lecture, what is the Signed Magnitude Representation -normalized & biased for -14 (no spaces please) |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | Correct 11001011000000 | | Correct Answer: |  |  |  |  |  | | --- | --- | --- | | **Evaluation Method** | **Correct Answer** | **Case Sensitivity** | | Correct*Exact Match* | 11001011000000 |  |  |  | | --- | |  | |  |  |  |

* **Question 7**

1 out of 1 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | Using 9-bit two's complement representation, convert 13510 to binary: **[x]** then perform an ASL operation on it: **[y]** (no spaces please) |  |  |  |
| |  |  | | --- | --- | | Specified Answer for: x | Correct010000111 | | Specified Answer for: y | Correct100001110 |  |  | | --- | | **Correct Answers for: x** |  |  |  |  | | --- | --- | --- | | **Evaluation Method** | **Correct Answer** | **Case Sensitivity** | | Correct*Exact Match* | 010000111 |  |  |  | | --- | | **Correct Answers for: y** |  |  |  |  | | --- | --- | --- | | **Evaluation Method** | **Correct Answer** | **Case Sensitivity** | | Correct*Exact Match* | 100001110 |  | |  |  |  |

* **Question 8**

1 out of 1 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | What are the names for these status bits? N **[w]** Z **[x]** V **[y]** C **[z]** |  |  |  |
| |  |  | | --- | --- | | Specified Answer for: w | Correctnegative | | Specified Answer for: x | Correctzero | | Specified Answer for: y | Correctoverflow | | Specified Answer for: z | Correctcarry |  |  | | --- | | **Correct Answers for: w** |  |  |  |  | | --- | --- | --- | | **Evaluation Method** | **Correct Answer** | **Case Sensitivity** | | Correct*Exact Match* | negative |  | | Correct*Exact Match* | Negative |  | | Correct*Exact Match* | NEGATIVE |  |  |  | | --- | | **Correct Answers for: x** |  |  |  |  | | --- | --- | --- | | **Evaluation Method** | **Correct Answer** | **Case Sensitivity** | | Correct*Exact Match* | zero |  | | Correct*Exact Match* | Zero |  | | Correct*Exact Match* | ZERO |  |  |  | | --- | | **Correct Answers for: y** |  |  |  |  | | --- | --- | --- | | **Evaluation Method** | **Correct Answer** | **Case Sensitivity** | | Correct*Exact Match* | overflow |  | | Correct*Exact Match* | Overflow |  | | Correct*Exact Match* | OVERFLOW |  |  |  | | --- | | **Correct Answers for: z** |  |  |  |  | | --- | --- | --- | | **Evaluation Method** | **Correct Answer** | **Case Sensitivity** | | Correct*Exact Match* | carry |  | | Correct*Exact Match* | Carry |  | | Correct*Exact Match* | CARRY |  | |  |  |  |

* **Question 9**

1 out of 1 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | RTL stands for **[x]** **[y]** **[z]** |  |  |  |
| |  |  | | --- | --- | | Specified Answer for: x | Correctregister | | Specified Answer for: y | Correcttransfer | | Specified Answer for: z | Correctlanguage |  |  | | --- | | **Correct Answers for: x** |  |  |  |  | | --- | --- | --- | | **Evaluation Method** | **Correct Answer** | **Case Sensitivity** | | Correct*Exact Match* | register |  | | Correct*Exact Match* | Register |  | | Correct*Exact Match* | REGISTER |  |  |  | | --- | | **Correct Answers for: y** |  |  |  |  | | --- | --- | --- | | **Evaluation Method** | **Correct Answer** | **Case Sensitivity** | | Correct*Exact Match* | transfer |  | | Correct*Exact Match* | Transfer |  | | Correct*Exact Match* | TRANSFER |  |  |  | | --- | | **Correct Answers for: z** |  |  |  |  | | --- | --- | --- | | **Evaluation Method** | **Correct Answer** | **Case Sensitivity** | | Correct*Exact Match* | language |  | | Correct*Exact Match* | Language |  | | Correct*Exact Match* | LANGUAGE |  | |  |  |  |

* **Question 10**

1 out of 1 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | The OR operator is also known as the BOOLEAN \_\_\_\_\_ because the truth table can be developed by adding the inputs. |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | Correct sum | | Correct Answer: |  |  |  |  |  | | --- | --- | --- | | **Evaluation Method** | **Correct Answer** | **Case Sensitivity** | | Correct*Exact Match* | sum |  | | Correct*Exact Match* | Sum |  | | Correct*Exact Match* | SUM |  |  |  | | --- | |  | |  |  |  |

* **Question 11**

1 out of 1 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | Binary representations of floating point numbers within the range of the representation are exact equivalents of the base ten numbers. |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | Correct False | | Answers: | True | |  | Correct False | |  |  |  |

* **Question 12**

1 out of 1 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | Using the signed magnitude 14-bit model from the lecture, what is the binary representation for negative infinity? (no spaces please) |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | Correct 11111100000000 | | Correct Answer: |  |  |  |  |  | | --- | --- | --- | | **Evaluation Method** | **Correct Answer** | **Case Sensitivity** | | Correct*Exact Match* | 11111100000000 |  |  |  | | --- | |  | |  |  |  |

* **Question 13**

1 out of 1 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | Which of these is NOT a computer character representation? |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | Correct   IEEE754 | | Answers: | BCD | |  | ASCII | |  | EBCIDC | |  | Correct   IEEE754 | |  |  |  |

* **Question 14**

1 out of 1 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | What does NAN stand for? **[x]** **[y]** **[z]** |  |  |  |
| |  |  | | --- | --- | | Specified Answer for: x | Correctnot | | Specified Answer for: y | Correcta | | Specified Answer for: z | Correctnumber |  |  | | --- | | **Correct Answers for: x** |  |  |  |  | | --- | --- | --- | | **Evaluation Method** | **Correct Answer** | **Case Sensitivity** | | Correct*Exact Match* | not |  | | Correct*Exact Match* | Not |  | | Correct*Exact Match* | NOT |  |  |  | | --- | | **Correct Answers for: y** |  |  |  |  | | --- | --- | --- | | **Evaluation Method** | **Correct Answer** | **Case Sensitivity** | | Correct*Exact Match* | a |  | | Correct*Exact Match* | A |  | | Correct*Exact Match* | A |  |  |  | | --- | | **Correct Answers for: z** |  |  |  |  | | --- | --- | --- | | **Evaluation Method** | **Correct Answer** | **Case Sensitivity** | | Correct*Exact Match* | number |  | | Correct*Exact Match* | Number |  | | Correct*Exact Match* | NUMBER |  | |  |  |  |

* **Question 15**

1 out of 1 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | In C++, what variable TYPE is defined by IEEE 754 double precision? |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | Correct double | | Correct Answer: |  |  |  |  |  | | --- | --- | --- | | **Evaluation Method** | **Correct Answer** | **Case Sensitivity** | | Correct*Exact Match* | double |  | | Correct*Exact Match* | Double |  | | Correct*Exact Match* | DOUBLE |  | |  |  |  |

### Question 1

0 out of 1 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | The status bits that are used to detect overflow of arithmetic functions are: |  |  |  |
| |  |  | | --- | --- | |  | Correct   V | | Answers: | N | |  | Correct   V | |  | Correct   C | |  | Z | |  |  |  |