Question 129

**What is C2 CO 8A 16 Hex single precision FP converted to Decimal?**

Not yet answered

Select one:

Marked out of 1

o

a. -**9.781250**

P Flag question

b. 0.078125

C. 9.7500

**d. -96.269*7***

**e. 152.1875**

**Question 130**

**A "pull down" resistor is used in digital circuits to do what?**

Not yet answered

Marked out of 1

Select one:

O a. **To make sure the digital line is always high**

P Flag question

O

b. **To keep the voltage at Volts**

c. **To keep the signa**l line "tied" low until the **line is active (goes** high)

d. **To keep the voltage at 1 Volt** e. To keep the signal "tied” high until the line is acti**ve (goes low)**

O o

**Question 131**

FPU used in Intel Architecture is defined as which of the following?

Not yet answered

Marked out of 1

Select one:

a. Fast Processing Unit

P Flag question

b. None of the answers

c. Fine Point User

d. all of the answers

e. Floating Point Unit

**Question 132**

What is the voltage for 10 output for an “OFF” signal?

Not yet answered

Marked out of 1

Select one:

O a. Between 2.5V to 3.3V

Flag question

b. None of the answers

c. Between 3.3V t*o 5V*

d. Between OV to 5V

e. all of the answers f. Around OV

O

**Question 133** Not yet answered

In the MicroChip PIC with a bit mask = 0x00, what bit mask operation would be used to configure Port D to output?

Marked out of 1

Flag question

Select one:

a. ANDing b. XORing c. XNORing

O

d. ORing

**Question 134**

Not yet answered

Marked out of 1

P Flag question

**What are the contents of BX after this program has been run:**

**Memory Contents Memory Contents**

**location**

**location MOV CX, 00FFh MOV BX,[550E) 5514 24**

F23F

24 **AND CX,[BX]** 5513 D8 F23E **MOV DX, 11h** 5512 0

F23D **MOV CX,[5512] 5511** 21 F23C **MOV BX, 5511h 5510**

F23B **SUB DX,[BX]** 550F F2

F23A 21 **AND BX, FF00** |550E 39 F239

Select one:

a. -0010h

**b. D800h**

c. 5500h

**d. 5511h**

**e. FFF0h**

f. 0010h

When should we uses pointers?

**Question 135** Not yet answered

Marked out of 1

Select one:

O a*. W*hen passing a large sized structure or data type

Flag question

b. All of the answers

c. When you are trying to pass by reference d. None of the answers e. Access certain address in memory

o

What logical operation indicates the inputs have the same value?

Question 136

Not yet answered

Marked out of 1

Select one:

O a. XNORing

Flag question

b. ORing c. XORing d. ANDing

O

**Question 137**

Not yet answered

Rotating an 8-bit register right one time changes the value of the register by what?

Marked out of 1

Flag question

Select one:

a. Divide by 2 b. Multiply by 4

0

c. Is the same

0

d. Zero

0

e. Multiply by 2

0

**Question 138** Not yet answered

The MicroChip Atmel AVR architecture is based on which of the following computer architecture(s)?

Marked out of 1

P Flag question

nann

Select one:

O a. Von Neumann

b. Harvard

c. Yale

O

O

O

d. all of the answers

O

e. Stanford

O

f. MIT

g. None of the answers h. Berkley

O

**Question 139**

**In the Propeller microcontroller, the command "waitcnt(clkfreq\*10 + cnt)" would cause the processor to do which of the following?**

Not yet answered

Marked out of 1

P Flag question

Select one:

O a. **to slow down 10 times**

**b. Create 10 millisecond delay** O c. **Create 10 microsecond delay**

**d. Create 10 second delay**

**e. Set the processor speed to 10 MHz** O f. **to speed up 10 times**

**Question 140**

**How many nibbles are in single precision IEEE floating point format numbers (32bit)?**

Not yet answered

Marked out of 1

Select one:

P Flag question

O

é

o

O O

d. 8

O O O

**e. 16 f. 64**

g. 2

h. 20

O O

i. 80

What is the definition of PW*M?*

**Question 119** Not yet answered

Marked out of 1

Select one:

O a. all of the answers

P Flag question

O O

b. Primary Working Microcontroller c. None of the answers

d. Pulse Write Mode

e. Pulse Width Mode

f. Pulse Width Modulation g. Preparatory Write Mode

o

**Question 120**

Not yet answered

Rotating an 8-bit register left seven time changes the value of the register by what?

Marked out of 1

P Flag question

Select one:

O a. Is the same

b. Zero

c. Multiply by 4 d. Divide by 2 e. Multiply by 2

o

Question 121

In the Microchip PIC with TRISD = 0b011**11111, what is the configuration of the Port D?**

Not yet answered

Marked out of 1

P Flag question

Select one:

O a. Bit 7 of port **D is set to input**

**b. Port D is set as an input port**

c. Po**rt D is set as an output port d. Port D is set to 127 decimal**

e. Bit 7 of port D is **set to output**

O

**Ladder Logic is used in\_**

Question 122

Not yet answered

Marked out of 1

Select one:

0 a**. Power Logic Controllers**

P Flag question

**b. ALUS**

**c. BIUS**

**d. CPUs**

**e. PLCs**

**Question 123** Not yet answered

In the MicroChip PIC with TRISD = 0b10000000, w**hat is the configuration of the Port D?**

Marked out of 1

P Flag question

Select one:

**a. Port D is set as an input port**

**b. Port D is set to 127 decimal** c. Port D is **set as an output port**

d. Bit 7 o**f port D is set to output**

**e. Bit 7 of port D is set to input**

**Question 124**

**The acronym PLC, is defined as which of the following?**

Not yet answered

Marked out of 1

Select one:

**a. Parallel Logic Controller**

P Flag question

**b. Power Logic Controller c. Programmable Logic Controller d. Parallel Low Computation** e. Power Limit Controller

o

What is the resolution of and 8bit ADC operating at 5 volts?

Question 125

Not yet answered

Marked out of 1

Select one:

a. 20 mV

Flag question

b. 20

V

c. O *V*

d. 20 nv

e. None of the answers

f. 5 *V*

Question 126 Not yet answered

The doubling of performance and having of the cost in the electronics industry is which of the following?

Marked out of 1

P Flag question

Select one:

a. Ohm's La*w*

b. None of the answers

o

c. Microsoft's Law d. Heedley's Law

e. Faraday's Law

f. Moore's Law

g. Intel's Law

**Question 127** Not yet answered

**AND'ing 10Hex and 2FHex will result in which of the following Hex numbers?**

Marked out of 1

P Flag question

Select one:

a. 3F O b. 45

O

C. 16

o

**Question 128**

What is the definition of DAC?

Not yet answered

Marked out of 1

Select one:

0 a. Data Asynchronous Converter

P Flag question

b. all of the answers

c. Data Analog Converter d. Digital Analog Converter e. None of the answers

o

A "pull up" **resistor is used in digital circuits to do what?**

**Question 110** Not yet answered

*M*arked out of 1

Select one:

**a. To keep the signal "tied" high until the line is active (goes low)**

P Flag question

o

**b. To keep the voltage at 1 Volt** c. **To make su**re the digital line i**s always high**

d. To keep the signal line "tied” low until the line is active (goes high)

o

e. T**o keep the voltage at Volts**

What is the advantage of Programmed 10 over Memory Mapped 10?

**Question 111**

Not yet answered

Marked out of 1

Select one:

O a. reduces the instructions required by the processor to communicate

with 10

P Flag question

O

o

b. can handle more 10

c. All of the answers

d. allows the processor to communicate with peripherals that have different data rates

o

e. None of the answers

O o

f. is more efficient programming g. is more efficient use of memory

**Question 112**

Not yet answered

**Which command would you use to execute another core in the propeller microcontroller?**

Marked out of 1

P Flag question

Select one:

0 a. **PUB** O b. EXE Core

**c. Cognew**

**d. Method**

**e. V*A*R**

**Question 113**

Shifting an 8-bit register left one time changes the value of the register by what?

Not yet answered

Marked out of 1

P Flag question

Select one:

a. Zero

O

b. Multiply by 4

c. Is the same d. Multiply by 2

e. Divide by 2

O

**Question 114**

**If CX is 0003, what will CX be after a "LOOPNZ" instruction?**

Not yet answered

Marked out of 1

Select one:

O a. 0003

P Flag question

b. 0002

c. 0000

O

**d. FFFF**

O

**e. BX**

O

f. 0001

O

**g. DX** h. AX

O

**Question 115** Not yet answered

**What is the hexadecimal encoding for loading AX with a word (value) from memory location 0820h?**

*M*arked out of 1

P Flag question

Select one:

O a. A12008

O

b. 8A262008

C. A**10820**

d. A00820

**e. 8B162008**

Question 116

Not yet answered

Marked out of 1

Flag question

**The Ladder Logic diagram would represent which of the following?**

Select one:

0 a. NAND O b. CLOSED CIRCUIT

**c. XOR**

**d. XNOR**

**e. OPEN CIRCUIT** Of. NOR

g. OR

**h. AND**

**Question 117**

**Which of the following would be used to set the TRISA register to control the direction of t**he Microchip PIC Port to input?

Not yet answered

Marked out of 1

Select one:

P Flag question

a. 1

**b. =output**

*C.* O

d. DIRA := 0

e*. =/*input

**Question 118** Not yet answered

12

Marked out of 1

**What are the contents of BX after this program? Program Memory location Contents MOV BX, 2024h 2026 MOV cx, 4eh DEC BX**

2024

39 AND CX, [BX] 2023

non

2025

P Flag question

Select one:

a. F239h

**b. 394Eh**

C. 2420h

d. 2023h

**e. 2024h**

**Question 116**

Answer saved

Marked out of 1

Flag question

**The Ladder Logic diagram would represent which of the following?**

Select one:

**a. NAND** O b. CLOSED CIRCUIT

C. XOR

**d. XNOR**

**e. OPEN CIRCUIT**

**f. NOR**

o g. OR Oh. AND

**Question 100**

In the MicroChip PIC with TRISD = 0b00001111 **and LATD = 0xAA, what value will be on Port D and shown on the LEDs?**

Not yet answered

Marked out of 1

Flag question

Select one: O a. O*A*

O

b. AA

O

c. FO

O

d. AO

O

**e. OF**

**What is the acronym RISC stand for?**

**Question 101**

Not yet answered

Select one:

Marked out of 1

o

a**. Right instruction set for computers**

Flag question

**b. Ready instruction set for computers**

**C. Reduce instruction set computer**

**d. Real instruction set complex**

**e. Realtime instruction set computer**

**Question 102**

**How many cores does the propeller microcontroller have?**

Not yet answered

Marked out of 1

Select one:

a. 8

P Flag question

b.4

**Question 103**

In the x86 which register in the segmented group is used for code?

Not yet answered

Marked out of 1

Select one:

a. All of the answers

Flag question

O

O

O

b. Si c. IP d. CX e. CS

f. None of the answers

g. BX

O

O

O

O

h. AX i. SS

O

O

j. DX

k. DS

O

O

I. SP

O

m. DI

**Question 104** Not yet answered

What is the advantage of Memory Mapped 10 over Programmed IO?

Marked out of 1

Select one:

o a. All of the answers

P Flag question

b. reduces the instructions required by the processor to communicate with 10

O

c. allows the processor to communicate with peripherals that have different data rates

d. is more efficient programming

O

O

e. None of the answers f. is more efficient use of memory g. can handle more IO

O

What logical operation clears a bit?

Question 105 Not yet answered

Marked out of 1

Select one:

a. ANDing

P Flag question

b. ORing

c. XORing

d. XNORing

**Question 106**

What is an infinite loop?

Not yet answered

Marked out of 1

Select one:

0 a. A loop that runs till a given condition

P Flag question

O o

b. A loop that runs once c. A loop that runs till done

d. A loop that runs till an input is given e. A loop that runs forever

What logical operation toggles a bit?

**Question 107**

Not yet answered

Marked out of 1

Select one:

0 a. XNORing

Flag question

b. ANDing

c. ORing d. XORing

**Question 108**

How many bytes are in a "char"?

Not yet answered

*M*arked out of 1

P Flag question

Select one:

a. 1 byte O b. 2 byte O c. 4 byte

d. None of the answers

Which of the following is a setback(s) of the Arduino platform?

**Question 109**

Not yet answered

Marked out of 1

Select one:

o a. all of the answers

P Flag question

b. None of the answers

O

c. Large Open Source Community d. Scaling to larger design e. Rapid prototyping and ready to use

o

**Question 90**

**What is -34 decimal in 2's complem**ent (8 bits)?

Not yet answered

Marked out of 1

Select one:

0 a. 0010 0010

Flag question

b. 1110 0111

C. 1101 1110

O

d. 0001 1001

e. 1011 0100

**Question 91** Not yet answered

Rotating an 8-bit register left eight times changes the value of the register by what?

Marked out of 1

P Flag question

Select one:

a. Divide by 2

b. Is the same

O o

c. Multiply by 2 d. Multiply by 4 e. Zero

Question 92 Not yet answered

**How many nibbles are in extended precision IEEE floating point format numbers (80b**it)?

Marked out of 1

Flag question

Select one:

**a. 16**

0

O O O

0

0

e. 2

O O O O O

f. 32 g. 4

h. 64

o

i. 8

**Question 93**

In the Microchip PIC with TRISD = 0b11110000 an**d LATD = 0xAA, what value will be on Port D and shown on the LEDs?**

Not yet answered

Marked out of 1

Select one:

Flag question

**a. OF**

é

o

o

**Question 94** Not yet answered

x86, an INT 15 service 86, will cause the processor perform which of the following?

Marked out of 1

P Flag question

Select one:

0 a. prints a string to the screen

b. takes in keyboard input

O

O

c. None of the answers d. terminates the program e. waits for a key to be pressed on the keyboard f. All of the answers

g. terminates the program with error

O

o

Question 95 Not yet answered

**The letters "NC” labeled on relays and PLCs means which of the following?**

*M*arked out of 1

Flag question

Select one:

**a. Normally Closed**

O b. Nor**mal Code** O c. **Not a Computer**

d. No Code

**e. Not Closed**

**Question 96**

Not yet answered

Marked out of 1

P Flag question

**The Ladder Logic diagram would represent which of the following?**

Select one:

O a. AND

b. OR o C. NAND

**d. OPEN CIRCUIT**

**e. XOR** f. CLOSED CIRCUIT

**g. NOR**

0

h. XNOR

**Question 97** Not yet answered

In the MicroChip PIC with a bit mask = 0xFF, what bit mask operation would be used to configure Port D to input?

Marked out of 1

P Flag question

Select one:

0 a. ОRing

b. ANDing

c. XORing

d. XNORing

**Question 98**

What library call would be used for I2C in Arduino?

Not yet answered

Marked out of 1

P Flag question

Select one:

O a. 12C library

b. None of the answers

c. Protocols Library d. Wire Library

e. All of the answers O f. Communication Library

Question 99

Not yet answered

Which of the follow**ing Debug commands would set a break point at memory location 010C?**

Marked out of 1

Flag question

Select one:

**a. G=010C**

o

b. B = 100 10C

c. G [010C]

d. B OC10

e. G= 100 10C

o

f. G 010C

**Question 70**

What is polling?

Not yet answered

Marked out of 1

Select one:

0 a. None of the answers

P Flag question

b. All of the answers

o

c. When a program determines if the IO is a input or output

d. When a program asks the 10 to give it information e. When the program actively sampling the status of a 10

**Question 71** Not yet answered

**What is the advantage of Assembly Language over C Language?**

Marked out of 1

Select one:

**0 a. All the answers**

Flag question

O O

b. **Hand assembly coding is much faster in C**

c. **C does not need a compiler to be assembled in to an executable program.**

**d. Assembly Language creates much faster executable code**

**e. C is transportable to other microprocessor architectures**

**Question 72**

**Compare and contrast the Harvard architecture with the von Neumann architecture.**

Not yet answered

Marked out of 1

Flag question

Select one:

O a. **The von Neumann architecture uses separate program and**

**data memory.** o b. The H**arvard architecture uses big endian addressing.**

o c. **The von Neumann architecture uses big endian addressing.**

**d. The Harvard type uses a separate program and data memory**

**e. The Harvard architecture uses programme*d I/*O.**

**Question 73**

On the Analog Discover*y*, what is the definition of AWG?

Not yet answered

Marked out of 1

Select one:

a. All of the answers

Flag question

b. None of the answers c. Arbitrary *Wav*e Generator

d. Auto Write Generator

O O

e. Arbitrary *W*rite Generator f. American Wire Gauge

**Question 7*4***

Not yet answered

What is an interrupt*?*

Marked out of 1

Select one:

a. A signal to the processor emitted by hardware or software indicating an event

P Flag question

b. When a program determines if the 10 is an input or output

c. When a program asks the 10 to give it information d. All of the answers

e. None of the answers f. When the program is actively sampling the status of a IO

o

o

**Question 75**

Not yet answered

x86, an INT 21 service 9, will cause the processor perform which of the

following?

Marked out of 1

Flag question

Select one:

O a. terminates the program with error

b. prints a string to the screen c. terminates the program

d. All of the answers

O

O

O

e. None of the answers

O

f. waits for a key to be pressed on the keyboard

g. takes in keyboard input

**Question 76**

**36 decimal would be what value in hexadecimal?**

Not yet answered

Marked out of 1

Select one: 0 a. 36

b. 24

P Flag question

c. OC

0

d. 18

0

e. 12

0

**What is the hexadecimal** encoding for "JGE” for a **jump back 12 bytes?**

**Question 77**

Not yet answered

Marked out of 1

Select one:

**a. 7DF2**

P Flag question

**b. 7DFA**

**c. 7DF*4***

**d. 7DF6**

***e*. 7DF4**

**Question 78**

Which of the following is(are) benefit(s) of the Arduino platform?

Not yet answered

Marked out of 1

p Flag question

Select one:

o a. Large Open Source Community

o b. Easy to implement functions

c. None of the answers d. Rapid prototyping and ready to use

e. all of the answers

**Question 79**

**What is 152.1875 Converted to double precision FP?**

Not yet answered

Marked out of 1

Select one:

a. 41 1c 00 00 00 00 00 00

P Flag question

b. c2 CO 8A 3D 00 00 00 00

C. 3D AO 00 00 00 00 00 00

d. 40 63 06 00 00 00 00 00

o

e. c1 1C 80 00 00 00 00 00

**Question 60**

**The instruction MOV CX, [Sl] is what addressing mode?**

Not yet answered

Select one:

Marked out of 1

o

a**. Immediate**

Flag question

**b. Scaled Index**

O

**c. Register**

**d. Register Indirect**

o

e. Direct

**Question 61**

The Intel x86 architecture is based on which of the following computer architecture(s)?

Not yet answered

Marked out of 1

Flag question

Select one:

0 a. Stanford

b. Berkley

O

c. None of the answers

d. Harvard

e. Von Neumann

f. Yale

g. MIT

**Question 62**

**Convert 129.C hexadecimal into decimal**

Not yet answered

Marked out of 1

Select one:

a. 281.12

Flag question

b. 129.C

C. 129.12

0

d. 81.75

0

e. *2*9*7.7*5

**Question 63**

In the Microchip PIC what bit mask would need to be applied to configure Port D to input? Assume ORing bit operation is applied.

Not yet answered

Marked out of 1

p Flag question

Select one:

a. OXOF O b. Oxfo

c. OxAO d. OxOA

e. None of the answers

f. OxFF

**Question 64**

**What is 458752.00 Converted to double precision FP?**

Not yet answered

Marked out of 1

Select one:

0 a. 40 63 06 00 00 00 00 00

Flag question

b. 3D A0 00 00 00 00 00 00

O

o

1c 00 00

00 00 00 00

O

d. c2 CO 8A 3D 00 00 00 00

O

e. c1 10 80 00 00 00 00 00

Question 65

Not yet answered

In the MicroChip PIC with a bit mask = 0xFF, what bit mask operation would be applied to LATD to switch the LED output?

Marked out of 1

Flag question

Select one:

0 a. XORing O b. ORing

C. ANDing d. XNORing

**Question 66**

**What is the RS232C specification voltage range for Logic O output?**

Not yet answered

Marked out of 1

Select one:

o a. -12v

P Flag question

O

b. -3v to -25v

C. +5 to +15v

d. -5v to -15v

**e. +3v to +25v**

**Question 67**

On the Analog Discovery, what tool is used to see the data from the UART?

Not yet answered

Marked out of 1

Select one:

o a. All of the answers

Flag question

b. Scope

c. Network

d. None of the answers

e. Logic

o

f. Logger

Which of the following is(are) benefit(s) of the Arduino platform?

**Question 68** Not yet answered

Marked out of 1

Select one:

o a. being able to scale up

P Flag question

O

b. cost

c. all of the answers

d. None of the answers

e. Rapid prototyping and ready to use

**Question 69** Not yet answered

In the Microchip PIC what bit mask would need to be applied to configure bit 4 of Port D to input? Assume ORing bit operation is applied.

*M*arked out of 1

Flag question

Select one:

a. Ox08

b. OxFF

c. OxAO

d. OxOA

e. OxA8

O

f. None of the answers

**Question 50**

**If the SP is FOOF, what is the SP *v*alue after a "POP CX" instruction?**

Not yet answered

Marked out of 1

Select one:

a. FOOD

P Flag question

b. F00C

c. F011

d. F010

e. F012

**Question 51** Not yet answered

**A microprocessor with a 33-bit address bus could access how much memory?**

Marked out of 1

Flag question

Select one:

**a. 64 GB**

**b. 8 GB**

c. 2 **GB**

d. 128 MB

e. 2 MB

o

f. 64 MB

What logical operation sets a bit?

**Question 52** Not yet answered

ili!

Marked out of 1

Select one:

O a. XNORing

P Flag question

O

b. XORing C. ANDing d. ORing

O

x86, an INT 20, will cause the processor perform which of the following?

**Question 53**

Not yet answered

Marked out of 1

Select one:

0 a. None of the answers

Flag question

O

b. waits for a key to be pressed on the keyboard

c. All of the answers

d. takes in keyboard input

e. terminates the program

f. prints a string to the screen

g. terminates the program with error

In the x86 which register in the pointer group is used for the data index?

**Question 54**

Not yet answered

Marked out of 1

Select one: оа. ВХ O b. IP

P Flag question

c. None of the answers

d. DS

e. CS

O

f. DI

O

g. All of the answers

O

h. AX

i. SI

O

O

O

j. SS k. CX 1. DX m. SP

O

O

Question 55

How many bytes are in an "int"?

Not yet answered

Marked out of 1

Select one:

o a. None of the answers

Flag question

b. 4 byte

c. a orb

d. 2 byte

**Question 56**

A "NOP” i**nstruction in an x86 progra**m will:

Not yet answered

Marked out of 1

Flag question

Select one:

O a. **Clear the Overflow flag O b. Perform a No Operation**

**c. Set a Normal Operating Point d. Reset the IP register**

**e. Exit the program**

**Question 57**

Not yet answered

**The binary number, 1000 0101, represents what values as an unsigned binary, 8-bit signed binary*,* odd parity ASCII, and BCD number (in that order)?**

Marked out of 1

P Flag question

Select one:

0 . ENQ, 133, -123, 85

O O

**O**

b. 85, 133, ENQ, -123 C. -123, 133, 85, ENQ

**d. 133, -123, ENQ, 85**