

QUESTION 1

Correct Mark 1.00 out of 1.00 Flag question

Here is a Mac address: 00-1D-FD-6F-46-95

It is written in hex. Give the bit sequence represented by the pair "1D" (please do not put spaces in the answer).

Answer: 00011101



The correct answer is: 00011101

QUESTION 2

Correct Mark 1.00 out of 1.00 Flag question

The hex digits are 0,1,2,3,4,5,6,7,8,9,a,b,c,d,e,f. Each hex digit represents:

- ☒ 4 bits
- ☐ anything from 0 to 4 bits
- ☐ a byte
- ☐ 16 bits

Your answer is correct.

The correct answer is: 4 bits

How many MAC addresses might a laptop have?

- ☐ Only one.
- ☒ It depends on how many network interfaces it has: one for each.
- ☐ Minimum one and maximum two.
- ☐ It depends on the Operating System that it is installed in the laptop. Windows assign more addresses, Linux less.
- ☐ It depends on the manufacturer. Some manufacturers tend to use more addresses than others.

Your answer is correct.

Every network interface (e.g., wifi, ethernet) has to have a MAC address. So it depends on the number of interfaces.

The correct answer is:

It depends on how many network interfaces it has: one for each.

QUESTION 10

Correct Mark 1.00 out of 1.00 Flag question

IP provides the information of **who** is the destination while TCP **how** the information shall be treated when travelling from source to destination.

Select one:

- ☒ True
- ☐ False

QUESTION 6

Partially correct Mark 0.75 out of 1.00 Flag question

A computer network is a set of computers . Many computer networks form what we call . To talk each other, they use called .

Your answer is partially correct.

You have correctly selected 3.

The correct answer is: A computer network is a set of computers [that are interconnected]. Many computer networks form what we call [the Internet]. To talk each other, they use [a suite of protocols] called [TCP/IP suite].

QUESTION 7

Partially correct Mark 0.83 out of 1.00 Flag question

Here is the output you will see:

```
0000000: 01100001 01100010 01100011 01100100 01100101 01100110 abcdef
0000006: 01000001 01000010 01000011 01000100 01000101 01000110 ABCDEF
000000c: 00110000 00110001 00110010 00110011 00110100 00110101 012345
```

How are the letters represented in the different character sets? Check the characters against their ASCII representation and verify that the binary and hex correspond. Each character should be eight binary bits and two hex digits. So in this example **01100010** corresponds to hex **62** and is character **b**. Note: you may see a weird character at the beginning of one of the files, with the hex representation of feff. This is a special unicode character called Byte order mark (BOM), which doesn't have a textual representation, but rather carries some information for the programmes reading the text (https://en.wikipedia.org/wiki/Byte_order_mark). ;

Complete the following table by dragging and dropping the appropriate value

My apologies for the formatting of this table. I do not believe I can correct it mid-quiz. You should be able to scroll right in order to see the last column or two, even if it goes beyond the regular width of the page. We'll correct this in future quizzes, but I am concerned that if I do that now, those of you who have already completed this question will find your answers being marked wrong.

Letter	Iso-Latin-1 (hex)	Iso-Latin-1 (binary)	UTF-8 (hex)	UTF-8 (binary)	UTF-16
a	<input type="text" value="61"/>	<input type="text" value="01100001"/>	<input type="text" value="61"/>	<input type="text" value="01100001"/>	<input type="text"/>
A	<input type="text" value="41"/>	<input type="text" value="01000001"/>	<input type="text" value="41"/>	<input type="text" value="01000001"/>	<input type="text"/>
e	<input type="text" value="65"/>	<input type="text" value="01100101"/>	<input type="text" value="65"/>	<input type="text" value="01100101"/>	<input type="text"/>
E	<input type="text" value="45"/>	<input type="text" value="01000101"/>	<input type="text" value="45"/>	<input type="text" value="01000101"/>	<input type="text"/>