

IDC2O – Test Review – Unit 3

1. The man who invented chess and asked for wheat that doubled on each square of the chessboard.	Sissa
2. Computing power doubles every how many months?	18
3. Who wrote that computing power doubles every 18 months, or halves in price for the same power?	Moore
4. In Sissa's chessboard, it is the part that is hard for humans to predict and understand.	2 nd half of the chessboard
5. The year of the singularity.	2045
6. What is the singularity?	A desktop computer will have the computing power of all the human brains on Earth. True artificial intelligence will exist.
7. When did Moore's Law start?	1965
8. The first self-driving car	Stanley
9. Stanley became the self-driving car for this company	Google (Stanley became the Google car)
10.The first computer to beat the best human chess player.	Deep Blue
11.The first computer to beat the best human Go player.	Alpha Go
12.The first computer to beat the best human Jeopardy player.	Watson
13.An AI that can write essays.	ChatGPT
14.An AI that can draw art.	Dall-e
15.T && T	T
16.T && F	F
17.F && T	F
18.F && F	F
19.T T	T
20.T F	T
21.F T	T
22.F F	F
23.!T	F
24.!F	T
25.What is the Boolean operator for greater than or equal to?	\geq (order matters)
26.What is the Boolean operator for equal to?	$=$
27.A Boolean expression for x is between 2 and 6	$x \geq 2 \text{ && } x \leq 6$
28.A Boolean expression for x is 1 or 4	$x = 1 \text{ } x = 4$
29.A Boolean expression for x isn't 1 and it isn't 4	$x \neq 1 \text{ && } x \neq 4$
30.Why are Boolean Expressions useful?	1. They evaluate to true or false 2. They are used to control ifs statements.

31.Why are ifs useful?	1. They allow our code to make DECISIONS. 2. If a Boolean expression is true, we can choose to do something. 3. We can have code that only runs in some conditions.
32.In a text variable, they are the addresses of each character.	Index
33.In a text variable, they are the space that holds each character.	Element
34.The index numbers of the text CAT would be this.	0 to 2
35.The length of the text CAT would be this.	3
36.List the 7 text functions	1. charAt 2. includes 3. indexOf 4. Length 5. Substring 6. toLowerCase 7. toUpperCase
37.Which text function gets an address and returns the character in that element?	charAt
38.Which text function gets a letter and returns the first index of that character?	indexOf
39.Which text function can slice a text variable up into smaller pieces?	Substring
40.Which text function tells you the number of characters in the text?	Length
41.Which text function converts the text to have all capital letters?	toUpperCase
42.Which text function converts the text to have all small letters?	toLowerCase
43.Cat > Dog	F
44.Zebra > Dog	T
45.Zebra != Zebra	F
46.Why would we compare two text variables?	To put them in alphabetical order
47.An encryption technique from ancient Rome.	Caesar Shift
48.An unbreakable encryption technique	RSA
49.An encryption technique where you move the first letter to the end and add ay	Pig latin
50.An encryption technique where you shift each letter	Caesar Shift
51.The people on the Western front in WWII who spoke over the radios in an unbreakable “code”	Cree Code Talkers

52.Functions are used to represent this on a binary tree.	Nodes
53.Function calls are used to represent this on binary tree.	Edges
54.Who wrote the book Alone Together?	Sherry Turkle
55.What are the 3 title comments?	Name, Date, Purpose
56.What is code that doesn't run?	Comments
57.What is a named block of code that can be called?	Function
58.What is a subprogram?	Function
59.How do you call a function?	With its name, brackets and a semi-colon. Eg. Name();
60.How do we code a node?	With a function
61.How do we code an edge?	With a function call
62.Why are comments useful?	1 – sign your work 2 – subtitles 3 – notes to self about things to finish 4 – comment out non-working code 5 – notes to others on team
63.Name 4 of Sherry Turkle's problems with social media use.	1 – Alone together 2 – Multi-tasking myth 3 – Marked Absent 4 – Always On 5 – Lack of Social Skills 6 – Lack of Empathy 7 – Illusion of Companionship
64.What was the name of the Microsoft chatbot that posted racist material?	Tay
65.What year was the Tay chatbot created?	2016
66.Where did Tay get it's training material?	Twitter.
67.How long did it take Tay to switch from puppies to racist posts?	24 hours.
68.What is the name of a lawyer who used ChatGPT to write its arguments?	Chong Ke – BC Steven Schwartz - US Federal Court Zachariah Crabbill – US
69.What is the problem with using ChatGPT to write legal arguments?	1 - It generates sentences using probability of the next word – not with knowledge. 2 - It made up legal precedents that did not exist.

70.Why is ChatGPT “Backward looking”?	It generates its sentence using materials that already exist on the internet.
71.Why is ChatGPT’s backward-looking features a problem?	It is hard to have social change when you are basing your evidence on the past.
72.What is an example of AI’s backward-looking nature?	<ul style="list-style-type: none"> - in 2018, Amazon’s hiring AI developed a rule that girls shouldn’t be programmers. - It wasn’t clear that it was doing this at first because it programmed itself.
73.What is a problem with using an AI to do your work if you are a student?	<ul style="list-style-type: none"> - you aren’t changing/building your brain. - you aren’t getting smarter. - If the AI is better than you... why hire you?