



Charles Darwin University

Final Examination

Family Name						
Given Name/s						
Student Number						
Teaching Period	Semester 2, 2020					

HIT137 – Software Now	DURATION	
	Reading Time:	15 minutes
	Writing Time:	120 minutes
	Scanning and uploading:	20 minutes
INSTRUCTIONS TO CANDIDATES		
<ol style="list-style-type: none">1. Read all questions carefully.2. Answer all questions.3. Total marks available on this test are 50.4. Questions are of equal value.5. Open book exam.6. Submit your solution in one single “.py” file.		
EXAM CONDITIONS		
<p><u>You may begin writing from the commencement of the examination session.</u> The reading time indicated above is provided as a guide only. Please make sure that you submit your work on time.</p>		
This is an OPEN BOOK examination		

Question 1

In the given text file '*HIT137cdu.txt*', programmatically count the total number of phrases: "You Make CDU" and "Great. You make CDU" and print it in the console.

(Marks: 10)

Question 2

A file concordance tracks the unique words in a file and their frequencies. Write a program that displays a concordance for the given file '*HIT137cdu.txt*'. The program should output the unique words and their frequencies in alphabetical order.

(Marks: 10)

Question 3

Write your initials (First characters of your Name) using turtle graphics. For example:

Name: John Robinson Doe

Initials: JD

(Only two letters are fine)

Use function to draw individual letter

(Marks: 10)

Question 4

CDU is a world class university with multiple colleges focused to give quality education. All of the colleges have some similarity in terms of structure, properties and functionalities. Using the object-oriented programming concept, can you create "College of Engineering, IT and Environment" and list out the number of students, list of courses available, building address, and print it on the screen? You can choose number of students, list of courses and building address of your own.

Hint: Use the concept of class & object

(Marks: 10)

Question 5

Create a python window containing a grid of 2x2 buttons. In that window, place 4 buttons that has 4 different functionalities:

1. Button 1: Pressing Button 1 will print a random integer number.
2. Button 2: Pressing Button 2 will print a random float number
3. Button 3: Pressing Button 3 will print a random lowercase word containing a-z
4. Button 4: Pressing Button 4 will print a random uppercase word containing A-Z

Example window will look like:

Button 1	Button 2
Button 3	Button 4

(Marks: 10)

“END OF EXAM”