

EECS 2021 - Assignment 1 (5%)

The aim of this assignment is for each student to become very familiar with a sub-section of the book.

This assignment is meant to create a learning aid to be shared with the whole class. The resources created from these assignment submissions will be compiled and shared with all students in the class to be used as study material.

The assignment topics are from the reference book “Computer Organization and Design – RISC-V Edition by D.A. Patterson and J.L. Hennessy. Please refer to the assignment name list to find out which topic is assigned to you.

- A) Topics 1.1 – 1.4, Questions: 1.4-1.5
- B) Topics 1.5 – 1.10, Questions: 1.5-1.15
- C) Topics 2.1 – 2.3, Questions: 2.1-2.5, 2.7-2.9
- D) Topics 2.4 – 2.6, Questions: 2.6, 2.9, 2.10-2.20
- E) Topics 2.7 – 2.8, Questions: 2.21, 2.23-2.33
- F) Topics 2.9 – 2.11 Questions: 2.22, 2.34-2.38
- G) Topics 2.12 – 2.14, Questions: 2.39 -2.40
- H) Topics 2.15 – 2.21, Questions: 2.41 – 2.42
- I) Topics 3.1 – 3.4, Questions: 3.1 – 3.19
- J) Topic 3.5, Questions: 3.20-3.31, 3.41-3.46
- K) Topics 3.6 – 3.10, Questions: 3.32 – 3.40, 3.47
- L) Topics 4.1 – 4.4, Questions: 4.1-4.15
- M) Topics 4.5 – 4.6, Questions: 4.16 – 4.23
- N) Topics 4.7 – 4.8, Questions: 4.24 – 4.29
- O) Topics 4.9 – 4.10, Questions: 4.30 – 4.31
- P) Topics 4.11 – 4.16
- Q) Questions: 4.16- 4.29
- R) Questions: 4.30 – 4.33

Instructions:

Write a report on that section with the following criteria:

Topics:

- Write a report on the sub-topic given and add more information from other resources such as the internet or other books
- Describe the facts in memorable ways
- Redraw diagrams to be more colourful and memorable
- Use additional tools like mind-maps, mnemonics, animation, etc.

- Add 'fun facts' as a paragraph or 'did you know' bubbles with any funny or weird bits of knowledge that you find related to your topic. These make the lesson more memorable.
- Create a summary that can be used as short notes to be reviewed by all students just before the exam. Add miniature images or be creative in any other way to enhance the summary.

Questions:

The point is not to just answer the questions correctly. Instead each question should have description of facts related to the questions such that reading through the answer is a review of the material. Do not describe every fact but do mention each of the facts that are related and should be known in order to solve the question (i.e. Program counter (PC) is a 32-bit register that stores current instruction's address)

Submission:

Please upload your assignment in Microsoft word (.docx) or open office (.odt) format on Moodle. The deadline for this assignment is midnight on 24 February 2018.