

COMPSCI 747 — Computing Education

Assignment 01

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Due: Midnight Friday, 27th March 2015

1 Introduction

You are required to develop an assessment exercise suitable for a novice programmer, either at high school or tertiary level. You should select a topic and design a programming exercise around that topic.

2 What to hand in

Submit your assignment via email directly to Andrew. Your assignment should include:

- A description of the exercise in appropriate language and sufficient detail for a novice programmer to understand the requirements.
- An example of appropriate input and output
- A sample solution to the exercise, including appropriate documentation
- A marking guide that uses the SOLO levels to determine an appropriate grade
- A system to test student solutions (perhaps doctest or manual system of testing), including test cases
- A list of all the topics/ concepts required to complete the task, including pre-requisite knowledge.
- Clear learning outcomes for the exercise, specifying what students are expected to learn. These should also be linked to either the ACM Curriculum document (if aimed at tertiary level) or the NCEA curriculum (if aimed at high school).
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2.1 Future use of your material

The resources you develop may be useful in future, either to use as teaching resources, or as examples for future students studying computer science education.

We would like you to explicitly either give permission, or NOT give permission for the future use of the resource material/report you submit. Please include one of the following statements at the end of the assignment:

- I give permission for this assignment to be used in future for educational purposes.

OR:

- I do NOT give permission for this assignment to be used in future for educational purposes.

Your grade for the assignment will not be affected regardless of whether or not permission is given.

3 Assessment

The assignment will be assessed using the following criteria:

- Overall presentation, quality and creativity of the resource material (3 marks)
- Sample solution, including documentation (1 mark)
- Marking guide and testing suite (2 marks)
- Mapping of knowledge required (2 marks)
- Appropriate learning outcomes for the resource, linking to curriculum documents (2 marks)

The assignment will be worth 10% of your final grade.