Bachelor of Science (Engineering)

BSC201C: Engineering Programming

Assessment 3
Paper C
Version 1

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Reviewed by:		Date:	

Assessment Task Instructions:

1. To allow for unforeseen circumstances such as illness, work or family commitments, it is advisable that you aim to complete the assignment a few days before the due. It is your responsibility to ensure that you factor in any time difference between Perth, Western Australia and your location when submitting assessments.

2. Extension requests must be formally submitted by completing an extension request form and emailing the form to your unit coordinator along with a medical certificate or other supporting documentations.

3. Only one (1) file can be submitted. Supplementary or additional appendices must be clearly titled and directly linked or mentioned within your written assessment and submitted in the Supplementary Submission Box. Should the assessor not be able to clearly link these documentations back to your main assignment, penalties may apply.

4. You must use the provided Assignment Cover Page document and submit your main written assessment in WORD FORMAT only. The only permissible file formats are **.docx or .doc** and you should not 'embed' other files as pictures within the word document.

5. You must save your document in WORD FORMAT and ensure the title is as follows:

   COURSECODE_UNIT#_ASSIGNMENT#_VERSION#_YOURNAME_DATE

   E.g. BSC201C_Assessment3_v1_BobBrown_01Oct2019

6. You must reference all content used from other sources. Do not copy and paste from course materials or any other resources or quote other source without referencing.

7. Assignments submitted through emails or any other methods will NOT be accepted.

8. You must ensure that you have submitted the correct file. Once you have submitted, you will not be able to re-submit a second attempt after the due date.

9. **Important Note**: Failure to adhere to these requirements may result in a zero grade. Please refer to the unit outline or *EIT Policies & Procedures* if you are unsure how to reference.

BSC201C: Engineering Programming

Assessment 3 – Project

Weight: 30%

Total marks: 40 marks

Please complete your answers in the provided Assessment Answer Sheet/Cover page in Moodle.

Clearly label your question numbers on your answer sheet (no need to copy the questions over). Include all working out.

Question 1: **(5 marks)**

Correct the following **for** loop.

```
for (i == first + 1: i < last: i+++) {
}
```

Question 2: **(5 marks)**

Correct the following **if** statement below.

```
#include <stdio.h>
int main(void)
{
int volt_1=12;
if(volt_1 < 10);
 {
 printf("This prints inside the if function \n");
 }
printf("This prints outside the if function \n");
}
```

Question 3: **(5 marks)**

List the functions used to OPEN a file, Write/print to a file (in append mode), and CLOSE a file.

Question 4: **(8 marks)**

Write a program to count the number of spaces in a sentence. The sentence is saved in the string "sentence".

Question 5: **(12 marks)**

Write a program to simulate an experiment flipping **three** coins. Each time the three coins are flipped, is called a "trial".

A coin flip can **randomly** result in either "Heads" (1) or "Tails" (0)

Allow the user to enter the number of "trial"s to simulate.

Print out each coins' result after each "trial".

Use seed value 1234.

Tally up and determine what percentage of "trial"'s **all three** coins land on "Heads" in the simulation.

END OF ASSESSMENT