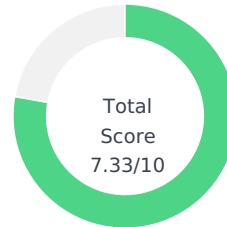




Email: aib743@student.bham.ac.uk
Test Name: **EFC Week 1**
Taken On: 30 Sep 2017 17:44:31 BST
Time Taken: 22 min 55 sec/ 60 min
UoB Student Number: 1784643
Invited by: Dan
Tags Score:

**Recruiter/Team Comments:**

No Comments.

	Question Description	Time Taken	Score	Status
Q1	Programming languages > Multiple Choice	43 sec	2/ 2	✓
Q2	Self-reference > Multiple Choice	3 min 42 sec	1.33/ 2	✓
Q3	Rewriting > Multiple Choice	2 min 19 sec	2/ 2	✓
Q4	Rewriting > Multiple Choice	9 min 30 sec	0/ 2	✗
Q5	Rewriting > Multiple Choice	6 min 15 sec	2/ 2	✓

QUESTION 1

Correct Answer

Score 2

Programming languages > Multiple Choice

QUESTION DESCRIPTION

Which of the languages below are based on the Lambda Calculus?

CANDIDATE ANSWER**Options:** (Expected answer indicated with a tick)

- ☐ ASSEMBLY
- ☐ C
- ✓ ☒ OCAML
- ☐ JAVA
- ✓ ☒ F#

No Comments

QUESTION 2

Correct Answer

Score 1.33

Self-reference > Multiple
Choice**QUESTION DESCRIPTION**

Which of the sentences below could be interpreted as self-referential (referring to themselves)?

CANDIDATE ANSWER

Options: (Expected answer indicated with a tick)

- ☒ ☐ I am a liar.
- ☒ ☐ I am going to tell you this only once.
- ☐ ☐ Self-referential sentences may lead to paradoxes.
- ☒ ☐ All sentences in 41 characters are false.

No Comments

QUESTION 3

Correct Answer

Score 2

Rewriting > Multiple
Choice**QUESTION DESCRIPTION**

Consider the rewriting system with the rules:

1. $XY \rightarrow YX$
2. $YX \rightarrow XY$

Starting from the initial string XXXYYY which of the strings below **can** be derived in this system?

CANDIDATE ANSWER

Options: (Expected answer indicated with a tick)

- ☒ ☐ XYXYXY
- ☒ ☐ YYYXXX
- ☐ ☐ XXXXXX
- ☐ ☐ XYYYY

No Comments

QUESTION 4



Wrong Answer

Score 0

Rewriting > Multiple
Choice

QUESTION DESCRIPTION

Consider the rewriting system with the rules:

1. $aa \rightarrow \epsilon$
2. $aaa \rightarrow aaaaa$
3. $aaa \rightarrow a$

Starting from the initial string aaaaaaaaaa which of the strings below **can** be derived in this system?

CANDIDATE ANSWER

Options: (Expected answer indicated with a tick)

- ☒ ☐ aaaaaaaaaaaaaaaaaaaaaa
- ☐ aaaaaaaaaaaaaaaaaaaaaa
- ☒ ☐ aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa
- ☐ a

No Comments

QUESTION 5



Correct Answer

Score 2

Rewriting > Multiple
Choice

QUESTION DESCRIPTION

In the **Llama Game**, which configurations below don't lead to a normal form (solution of the puzzle)?

CANDIDATE ANSWER

Options: (Expected answer indicated with a tick)

- ☐ $\triangleright \triangleleft \square \triangleright \triangleleft \square$
- ☒ ☐ $\triangleright \triangleright \triangleleft \square \triangleright \triangleleft \square$
- ☒ ☐ $\triangleright \triangleright \triangleleft \square$
- ☐ $\triangleright \triangleleft \square \triangleright \triangleleft \square \triangleright \triangleleft \square$

No Comments