CS 141 Homework 7 Report

Alexis Lauren Vu

TOTAL POINTS

30 / 30

QUESTION 1

Passing 30 pts

1.1 reference **10 / 10**

✓ **- 0 pts** Correct

- 2 pts A = (0 1 2)

- 5 pts A = (0 1 2)

- 3 pts Did not select pages correctly

1.2 value-result **10 / 10**

✓ **- 0 pts** Correct

- 2 pts A = (1 3 3)

- 5 pts A = (1 3 3)

- 3 pts Question not marked correctly.

1.3 name **10 / 10**

✓ **- 0 pts** Correct

- 2 pts A = (1 5 2)

- 5 pts A = (1 5 2)

- 3 pts Question not selected correctly.

Download this homework assignment, and fill in your answers, then convert this document into pdf as a report to GradeScope. Be sure you know how to trace programs like this on paper; you will do it on the quiz and on the final.

1. **[30]** Consider the following procedure in Ada-like syntax (with <u>1-indexed</u> arrays):

```
PROCEDURE Main IS
        i: integer := 3;
        type vector is array (1..3) of integer;
        a: vector := (3, 1, 2);
        PROCEDURE Put (v: vector) IS
        BEGIN
                Put_Line ("A = (");
                FOR i IN v'range LOOP
                        Put_Line (v(i));
                        Put_Line (" ");
                END LOOP;
                Put_Line (")");
        END Put;
        PROCEDURE Do_Something (t: mode integer) IS
        BEGIN
                i := i - 1;
                t := i + 1;
                a(t) := a(i) + 1;
                a(i) := a(t) + 1;
                i := i - 1;
                a(t) := t - 1;
                a(i) := a(t) - 1;
        END Do_Something;
BEGIN
        Do_Something(a(i));
        Put (a);
END Main;
```

What would be the output, assuming the parameter passing mode is pass by:

e.g. copy: value
A = (1 3 2)
a. reference
A = (0 1 2)
b. copy: value-result
A = (1 3 3)
c. name
A = (1 5 2)

1.1 reference **10 / 10**

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1.2 value-result **10 / 10**

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