CS 141 Homework 5 Report

Alexis Lauren Vu

TOTAL POINTS

20 / 20

QUESTION 1

1 20 pts

1.1 a - size 10 / 10

✓ **- 0 pts** **Correct**

- 5 pts Not selected correctly

- 5 pts 16,16,160

1.2 b - address 10 / 10

✓ **- 0 pts** **Correct**

- 5 pts 1095,1072,1096

- 5 pts Answer not properly marked.

Programming Languages
Homework 5
Due Wednesday, February 12th at 2 AM

Download this homework assignment, and fill in your answers, then convert this document into pdf as a report to GradeScope. We are scanning this report so please **do not change the first-page layout.** For question 1, put the answers for the sizes in the indicated areas below; For question 2, paste your code for each of the lisp functions.

1. Consider the following C++ declarations and assume int is 4 bytes, double is 8 bytes, and char is 1 byte:

```
struct Bar {
     double f;
     int i;
     char c,d,e,g;
};
union Foo {
     double f;
     char c;
     Bar b;
};

Foo a[10];
Bar b;
Foo f;
```

   a. [10] Give the size (in bytes and in decimal) of each of the following variables:

   - **Bar::c = 1 byte // This is an example**
   - b = 16
   - f = 16
   - a = 160

   b. [10] Give the address (in decimal) of each of the following assuming the address of a is 1000:

   - a[5].b.g = 1000 + 5(16) + 0 + 15 = 1095
   - a[4].b.i = 1000 + 4(16) + 0 + 8 = 1072
   - a[6].f = 1000 + 6(16) + 0 = 1096

1.1 a - size **10 / 10**

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1.2 b - address **10 / 10**

✓ **- 0 pts** **Correct**

- 5 pts 1095,1072,1096

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