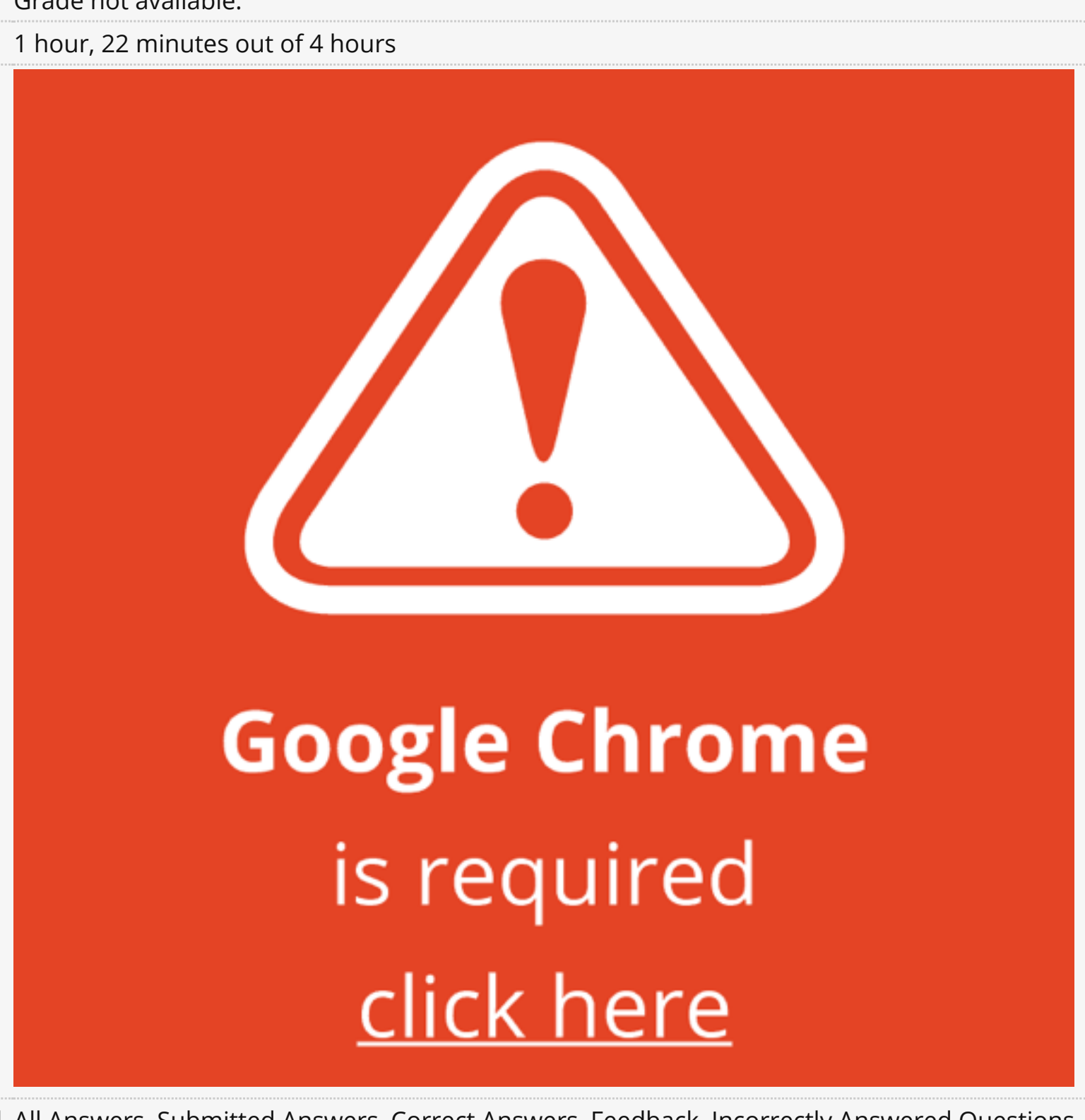
Review Test Submission: Sample Exam 2 (Secure Browser)

User	Rod Miles Simms
Course	CS-1714-0B1-Fall-2020-Computer Programming II
Test	Sample Exam 2 (Secure Browser)
Started	10/27/20 9:25 AM
Submitted	10/27/20 10:47 AM
Status	Needs Grading
Attempt Score	Grade not available.
Time Elapsed	1 hour, 22 minutes out of 4 hours
Instructions	

Results Displayed All Answers, Submitted Answers, Correct Answers, Feedback, Incorrectly Answered Questions

Question 1
4 out of 4 points

Given this code to read in a file named **a.txt**, what do we know about the structure of the content in **a.txt**? Assume that **fileIn** is an open pointer to a file.

```
char str1[ 20 ], str2[ 20 ];
int num;
while( fscanf( fileIn2, "%s %d %s", str1, &num, str2 ) == 3 )
{
    printf( "%s %d %s\n", str1, num, str2 );
}
```

Selected Answer: ✔ The file contains a repeating pattern of string, int, string separated by a space

Answers:
- The file contains alternating rows of string's and int's
- The file contains a repeating pattern of string, int, string, int separated by a space
- The file contains alternating rows of int's and strings
- ✔ The file contains a repeating pattern of string, int, string separated by a space
- The file contains a repeating pattern of string, int, string separated by a comma

Question 2
4 out of 4 points

In Linux, what is the command to remove a file?

Selected Answer: ✔ rm

Answers:
- trash
- cm
- dm
- ✔ rm

Question 3
4 out of 4 points

In vim, which of the following commands can take you from Command mode to Insert mode?

Selected Answer: ✔ a

Answers:
- ✔ a
- yy
- $
- :w!

Question 4
0 out of 4 points

What is the result the function call **function(6);** with this recursive function?

```
int function(int n)
{
    return n +  function(n-2);
}
```

Selected Answer: ✘ 4

Answers:
- 4
- ✔ Stack overflow
- 2
- 6

Question 5
0 out of 4 points

What is the output of the following code?

```
#include<stdio.h>
int main(int argc, char *argv[])
{
   char a[] = "Hello";
   a = "World";
   printf("%s", a);
   return 0;
}
```

Selected Answer: ✘ World

Answers:
- Hello
- ✔ Compile-time Error
- World
- HelloWorld

Question 6
4 out of 4 points

In vim, in Command mode, what is the command to save the workspace and quit?

Selected Answer: ✔ ZZ

Answers:
- :qew
- ✔ ZZ
- :exit
- zz

Response Feedback: Since there was a typo in the options, you will receive full credit for this. The correct answer should be "ZZ".

Question 7
4 out of 4 points

What functions can you use to have a user input a string?

Selected Answers: ✔ **scanf()** ✔ **fgets()**

Answers:
- **input()**
- ✔ **scanf()**
- ✔ **fgets()**
- **fscanf()**

Question 8
4 out of 4 points

Which of the following is NOT a descriptor of a makefile?

Selected Answer: ✔ It can split a source file into several object and header files.

Answers:
- It is a set of rules on how to recompile and link a program whenever there are changes to source and header files.
- You can create a rule to generate the executable.
- ✔ It can split a source file into several object and header files.
- You can create a rule to remove any generated files from make.

Question 9
4 out of 4 points

Which of the following is the correct syntax to declare and an initialize an array in C?

Selected Answer: ✔ int a[] = { 2, 3, 5, 8 };

Answers:
- ✔ int a[] = { 2, 3, 5, 8 };
- int [] a = { 2, 3, 5, 8 };
- int a= { 2, 3, 5, 8 };
- int [] a = new int[4] { 2, 3, 5, 8 };

Question 10
0 out of 4 points

What is the output of the following code?

```
#include<stdio.h>
#include<string.h>

int main(int argc, char *argv[])
{
   char *str1 = "hello world";
   char *str2 = "hello world";
   if (strcmp(str1, str2))
      printf("equal");
   else
      printf("unequal");
}
```

Selected Answer: ✘ equal

Answers:
- compile-time error
- ✔ unequal
- run-time error
- equal

Question 11
4 out of 4 points

What is the output of the following code?

```
#include<stdio.h>
int fun(int);
int main(int argc, char* argv[])
{
   int i=3;
   fun(i=fun(fun(i)));
   printf("%d\n", i);
   return 0;
}
int fun(int i)
{
   i++;
   return i;
}
```

Selected Answer: ✔ 5

Answers:
- 6
- 3
- 4
- ✔ 5

Question 12
0 out of 4 points

What is the output of the following code?

```
#include<stdio.h>
int main(int argc, char* argv[])
{
 int a = 25, b = 24 + 1, c;
 printf("%d", function(a, b));
 return 0;
}
int function(int x, int y)
{
 return (x - (x == y));
}
```

Selected Answer: ✘ 25

Answers:
- 25
- 24
- ✔ Compile-time error
- Run-time error

Question 13
4 out of 4 points

What is the output of the following code?

int numbers[] = { 35, 57, 78, 66, 41, 12 };

int *ptrA = numbers;

int *ptrB = ptrA + 2;

int *ptrC = ptrB + 1;

```
printf( "%d, %d, %d\n", *ptrA, *ptrB, *ptrC );
```

Selected Answer: ✔ **35, 78, 66**

Answers:
- **66, 35, 41**
- **35, 78, 57**
- ✔ **35, 78, 66**
- **66, 78, 41**

Question 14
4 out of 4 points

Consider these two string variables:

char str1[] = "computer";

char str2[20];

How do you assign **str1** to **str2** so that both strings have the same characters?

Selected Answer: ✔ **strcpy(str2, str1);**

Answers:
- **str2 = str1;**
- **strcpy(str1, str2) = 0;**
- ✔ **strcpy(str2, str1);**
- **strcpy(str1, str2);**

Question 15
0 out of 4 points

When you compile one source file at a time, what is the resultant file?

Selected Answer: ✘ linker

Answers:
- pre-processor macros
- ✔ object file
- linker
- header file

Question 16
Needs Grading

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Assume that you have a CSV file which contains the information for employees. The structure for the data is - name, ID, salary. See the example below.

```
John,21,30000
Steve,22,70000
Mary,23,60000
Lucy,24,50000
```

The struct definition is provided to you as follows:

```
typedef struct Employee_struct
{
    char name[10];
    int id;
    double salary;
} Employee;
```

Write the **code** that does the following:

- (4 pts) Verify the number of command line arguments to make sure the user is running the program correctly. If not print out the error message "Usage: ./exeName inputFile.csv outputFile.csv" and "return -1".
- (4 pts) Open the input file, provided in command line argument, for reading and check if it was opened successfully. If not, "return -1".
- (4 pts) Go through the file once and calculate the number of lines in the file. Assume, there is NO header row.
- (4 pts) Dynamically allocate the array for the Employee struct.
- (6 pts) Read the file again and store the data into the dynamically created array above.
- (2 pts) Close the input file being read.
- (4 pts) Open the output file, provided in command line argument, for writing and check if it was opened successfully. If not, "return -1".
- (6 pts) Go through the array and calculate the best employee, one who has the highest salary. Write the employee name, ID and the salary value into the output file. Following is the sample output file for the given input file example.

```
Steve,22,70000
```

- (2 pts) Close the output file.
- (4 pts) Free the dynamically allocated array and "return 0" from the main function.

Assumptions:

- You are writing this code in the **main()** function. Write only the code to do the above. DO NOT create any other functions.
- All header files you would need are included.
- The struct definition is also written and included before the main function, so you can directly use it, you do not need write it.

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Selected Answer: [None Given]
Correct Answer: [None]
Response Feedback: [None Given]

Question 17
Needs Grading

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Write the code for a **MAKEFILE**, considering that you have the following files: `main.c, flights.h & flights.c`

The dependencies/includes for each file are as below:

```
main.c -> flights.h
flights.c -> flights.h
```

Without the use of a makefile, you would compile the program as below:

```
gcc main.c flights.c -o myProg
```

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Selected Answer: [None Given]
Correct Answer: [None]
Response Feedback: [None Given]

Question 18
Needs Grading

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Write a **recursive function** that returns the **MIN** of a given array.

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Selected Answer: [None Given]
Correct Answer: [None]
Response Feedback: [None Given]

Question 19
Needs Grading (Extra Credit)

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Write a **recursive function** to calculate and return **factorial** of a given number 'n'.

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Selected Answer: [None Given]
Correct Answer: [None]
Response Feedback: [None Given]

Tuesday, October 27, 2020 10:49:59 AM CDT

← OK