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| --- | --- |
|  | Project <1> |
|  |  |
|  | Name: Odalis R. Flores  Class: CMSC 140, CRN: 21714  Due Date: 9/30/19 |

**Test Page**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Test Case #** | **Input** | **Actual Input** | **Expected Output** | **Actual Output** | **Did the test pass?** |
| 1 | 2  4  5 | 2  4  5 | 24  720  17280  1036800  62208000  14  10  9  0  .8 | 24  720  17280  1036800  62208000  14  10  9  0  0.8 | Y |
| 2 | 89  89  98 | 89  89  98 | 1068  32040  768960  46137600  2768256000  623  445  187  0  0.9 | 1068  32040  768960  46137600  2768256000  623  445  187  0  0.9 | Y |
| 3 | 23  1005  963 | 23  1005  963 | 276  8280  198720  11923200  715392000  161  115  1968  1  1.0 | 276  8280  198720  11923200  715392000  161  115  1968  1  1.0 | Y |
| 4 | 2019  108  259 | 2019  108  259 | 24228  726840  17444160  1046649600  62798976000  14133  10095  367  0  0.4 | 24228  726840  17444160  1046649600  62798976000  14133  10095  367  0  0.4 | Y |

**Screenshots**

**Case 1**

A screenshot of a computer screen

Description automatically generated

**Case 2**

A screenshot of a computer screen

Description automatically generated

**Screenshots**

**Case 3**

A screenshot of a computer screen

Description automatically generated

**Case 4**

A screenshot of a computer screen

Description automatically generated

Declare variable for username and numberOne

Start

Display “Hello, welcome to Montgomery College! My name is Nao. May I have your name?”

Get username

Display “Let me impress you with a small game. Please give me only a number:”

<<endl

Get numberOne

Display “you have entered” variable numberOne

Display “If this is for a person, the age can be expressed as numberOne years”

Declare variables :

secondsInMinute = 60,

minutesInHour = 60,

daysInMonth = 30,

monthsInYear =12,

hoursInDay =24,

dogYears = 7,

goldFishAge = 5

A

a

A

numberOne \* monthInYear \*daysInMonth \*hoursInDay \*minutesInHour

Display “Or numberOne\* monthsInYear”

numberOne\* monthsInYear

Display “Or about numberOne \* monthInYear \*daysInMonth \*hoursInDay \*minutesInHour \*secondsInMinute seconds”

Display “Or about numberOne \* monthInYear \*daysInMonth days”

numberOne \* monthInYear \*daysInMonth \*hoursInDay \*minutesInHour \*secondsInMinute

numberOne \* monthInYear \*daysInMonth

Display “If this is for a dog, it is numberOne \* dogYears years in human age”

Display “Or about numberOne \* monthInYear \*daysInMonth \*hoursInDay hours”

numberOne \* dogYears

numberOne \* monthInYear \*daysInMonth \*hoursInDay

Display “If this is for a gold fish, it is numberOne\*goldfishYears “years in human age.”

Display “Or about numberOne \* monthInYear \*daysInMonth \*hoursInDay \*minutesInHour minutes.”

numberOne\*goldfishYears

a

B

Declare two variables

Int numberTwo

numberThree

B

Display “Lets play another game userName. Give me a whole number”

Get numberTwo

Display “Very well, give me another whole number.”

Get numberThree

Display “Using the operator ‘+’ in C++, the result of numberTwo + numberThree is”

Solve numberTwo + numberThree

Display “Using the operator ‘/’ in C++, the result of numberTwo / numberThree is”

C

C

Display “However, the result of numberTwo (in decimal form) / numberThree (in decimal form) is”

Display “Thank you for testing my program!”

numberTwo (in decimal form) / numberThree (in decimal form)

Solve numberTwo / numberThree

End

**Lessons Learned during Project <1>**

While working on Project 1 I did run into many issues. I worked on the code before I started working on the flowchart. I think that making this mistake caused a lot on confusion on my end on where to begin. The flow chart states the variables being assigned as the code is being created but when I was creating the code in visual studio I found it more helpful to have all the variables assigned first so that I knew I was assigning them all correctly. When I was running the program, it was also easier to catch my mistakes.

Another issue I ran into is that there were too many files in project one module that gave me examples/templates and it was not all very clear until I read them all. I would’ve liked to have just one file with the grading criteria and project information. I had to do some editing after thinking I was finished because another filed contained more information that should be added into my project code.

The most complicated situation for me was figuring out how to code the game when the user enters 2 whole numbers and we write the addition and division operand. The complicated part to me was displaying the number in decimal point. I had written different codes that all displayed what needed to be displayed and then I figured out what I was doing wrong and how to fix it. I was naming the variables integer data types. Therefore, when I tried to display the showpoint and setprecision I was unsuccessful until I realized I had to either cast the integer to a double or float because those data types do hold decimal values. When I attempted to declare the variable a double or float to begin with the other operands would give me the correct value but the wrong display therefore, I decided to cast the numbers.

Overall this was a very helpful project. It covers chapters 1-3 perfectly. If I could do something different for my project, I would have started a bit earlier and try to make time for tutoring sessions and I would read all the files for the project before getting started with flowchart/pseudocode or coding.

A