Problem #1: How much should I study outside of class?

Students of the school need help identifying the amount of study hours they need per week to earn the grades they are striving for. The program will ask their full name and the number of credit hours they are enrolled in. Plus, they will input the grade they want to earn for all the classes as one entry. The program will compute the given data to find the required study hours. The program will display the student name, credits, study hours, and the grade working towards. This program will repeat for all the students until the user enters “n” or “N” in begin prompt. After the program will compute the total number of students, the average of credits hours taking by the group of students using the program and the average number of study hours.

1. **The program displays for each student:**

**Study Time Info for:**

**-------------------------**

**Student Name: | Jeremy Bargy**

**Credits: | 12**

**Study Hours: | 60.0**

**Grade: | A**

**At the end of the program, the program displays:**

**Group Study Info:**

**------------------**

**Total Number of Students: | 1**

**Average Credit Hours: | 12.0**

**Average Study Hours: | 60.0**

**ALGORITHM**

1. Display Welcome message
2. Display Developer name
3. Show user Description of program
4. Ask user if the student has read the instructions and is ready to have their study time identified
   1. “y” or “Y” = yes
   2. “N” or “n” = no
5. Ask user **firstName**
   1. Validate to make sure user entered letters for name and not null value
   2. accumulate for number of student totals
   3. **totalNumStudents** +=1
6. Ask User **lastName**
   1. Validate to make sure user entered letters for name and not null value
7. Ask user to enter **creditHours** enrolled in
   1. Verify it is a number
   2. Validate to make sure user entered a positive number and it is divisible by 3
   3. accumulate for credit hours
   4. **totalCredits** += **creditHours**
8. Ask user to enter **grade** wanting to earn
   1. Verify it is a letter
   2. Validate value is ‘A’, ‘B’, ‘C’, ‘D’, or ‘F’ and not null value
   3. Grade entered will equal **studyHours per class** *~see next page for table*

|  |  |
| --- | --- |
| **GRADE** | **STUDY HOURS PER WEEK PER CLASS** |
| A | 15 |
| B | 12 |
| C | 9 |
| D | 6 |
| F | 0 |

1. Calculate the number of classes enrolled in
   1. **Number of classes** = **creditHours** / **CLASSPERHOURS**
2. Calculate the total study hours for student
   1. **TotalStudyHours** = **studyHours** \* **numberofClasses**
   2. accumulate for **totalstudy**
   3. **alltotalStudyHours += TotalStudyHours**
3. Display **Student name**, **total study hours**, **credit hours** enrolledin, and **grade** they want to earn
4. Ask if there is another user to enter data
   1. If “Y” for yes, repeat steps 5-11
   2. If “N” for no, continue to next steps
5. Calculate total number of students
   1. **totalNumberofStudents = sum of all students**
6. Calculate Average Credit hours
   1. **averageCredits = (totalCredits)/ totalNumberofStudents**
7. Calculate Average Study Hours
   1. **averageStudyHours = (alltotalStudyHours)/ totalNumberofStudents**
8. Display **total number of students**, **average credit hours**, and **average study hours**
9. Ask for user to restart program or end program
   1. Validate input
   2. If ‘Y’ for yes, Loop back to step 1 for next group
   3. If “N” for no, display farewell message

**VARIABLES/CONSTANTS**

startProgram (str)

beginSequence (str)

contSequence (str)

firstName(str)

lastName(str)

creditHours(int)

studyHours(int)

totalNumStudents (int)

AverageCredits (float)

AverageStudyHours (float)

TotalStudyHours (int)

numberofClasses (int)

totalCredits=0 (int)

alltotalStudyHours=0 (int)

CLASSPERHOURS=3 (int constant)

**FORMULAS**

**Number of classes = creditHours / CLASSPERHOURS**

* Calculate the number of classes enrolled in

**totalStudyHours = studyHours \* creditsHours**

* Calculate the total study hours for student

**totalNumStudents +=1**

* Accumulator for student totals

**totalCredits += creditHours**

* initialize accumulator for credit hour averages

**alltotalStudyHours += TotalStudyHours**

* *accumulator for totalstudy hour averages and totals*

**averageCredits = (totalCredits)/ totalNumStudents**

* Calculate Average Credit hours

**averageStudyHours = (alltotalStudyHours)/ totalNumStudents**

* Calculate Average Study Hours

**TEST DATA – *section A* ~** (italicized text in output column is only for readability, will not show in program)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Input**  **firstName** | **Input**  **lastName** | **Input**  **creditHours** | **Input**  **grade** | **Process**  **Number of classes**  **(creditHours** / 3.0) | **Process**  **TotalStudyHours**  **(studyHours \* numberofClasses)** | **Output (Expected Results)**  **Student name**, **total study hours**, **credit hours**, and **grade** |
| 1. a. Jeremy 2. Jessie 3. Steven 4. Tyler 5. Sammie | 1. *Bargy* 2. *Cork* 3. *Thomas* 4. *Reyes* 5. *Taylor* | 1. 12 2. 15 3. 12 4. 6 5. 3 | 1. *A* 2. *B* 3. *C* 4. *D* 5. *F* | 1. 12/3=4 2. 15/3=5 3. 12/3=4 4. 6/3=2 5. 3/3=1 | 1. *4\*15=60* 2. *5\*12=60* 3. *9\*4=36* 4. *2\*6=12* 5. *1/0=0* | 1. Student Name: Jeremy Bargy   Credits: 12  Study Hours: 60  Grade: A   1. *Student Name: Jessie Cork*   *Credits: 15*  *Study Hours: 60*  *Grade: B*   1. Student Name: Steven Thomas   Credits: 12  Study Hours: 36  Grade: C   1. *Student Name: Tyler Ryes*   *Credits: 6*  *Study Hours: 12*  *Grade: D*   1. Student Name: Sammie Taylor   Credits: 3  Study Hours: 0  Grade: F |
| 1. ~~a. 4~~   Jeremy  b. Taylor  c. Ryan  d. Kimmy | 1. *Bargy* 2. *Sammy* 3. *Reyes* 4. *Flowers* | 1. 15 2. 12 3. 6 4. 6 | 1. *B* 2. *C* 3. *A* 4. *B* | 1. 15/3=5 2. 12/3=4 3. 6/3=2 4. 6/3=2 | 1. *5\*12=60* 2. *4\*9=36* 3. *2\*15=30* 4. *2\*12=24* | ***a.*** Student Name: Jeremy Bargy  Credits: 15  Study Hours: 60  Grade: B  ***b***. *Student Name: Taylor Sammy*  *Credits: 12*  *Study Hours: 36*  *Grade: C*  ***c.*** Student Name: Ryan Reyes  Credits: 6  Study Hours: 30  Grade: A  ***d.*** *Student Name: Kimmy Flowers*  *Credits: 6*  *Study Hours: 24*  *Grade: B* |
| 1. a. Tony   b. Wendy  c. Tony | *Gaddis*   1. *Payne* 2. *Hawk* | 1. 9 2. 15 3. 15 | 1. *A* 2. *A* 3. *A* | 1. 9/3=3 2. 15/3=5 3. 15/3=5 | 1. *3\*15=45* 2. *5\*15=75* 3. *5\*15=75* | 1. Student Name: Tony Gaddis   Credits: 9  Study Hours: 45  Grade: A   1. *Student Name: Wendy Payne*   *Credits: 15*  *Study Hours: 75*  *Grade: A*   1. Student Name: Tony Hawk   Credits: 15  Study Hours: 75  Grade: A |
| 1. a. Bush   b. Karen | 1. *Williams* 2. *Manager* | 1. ~~21~~ 12 2. 15 | 1. *C* 2. *C* | 1. 12/3=4 2. 15/3=5 | 1. *4\*9=36* 2. *5\*9=45* | 1. Student Name: Bush Williams   Credits: 12  Study Hours: 36  Grade: C   1. *Student Name: Karen Manager*   *Credits: 15*  *Study Hours: 45*  *Grade: C* |
| 1. a. Pacifica | 1. *Long* | 1. 12 | 1. *~~E~~ A* | 1. 12/3=4 | 1. *4\*15=60* | 1. *Student Name: Pacifica Lang*   *Credits: 12*  *Study Hours: 60*  *Grade: A* |

**TEST DATA – *section B* ~** (italicized text in output column is only for readability, will not show in program)

|  |  |  |  |
| --- | --- | --- | --- |
| **Process**  **totalNumberofStudents**  **totalNumStudents** | **Process**  **averageCredits**  **totalCredits / totalNumStudents** | **Process**  **averageStudyHours**  **alltotalStudyHours / totalNumStudents** | **Output (Expected Results)**  **totalNumberofStudents, averageCredits, and averageStudyHours** |
| 1. 5 | 1. 48/5=9.6 | 1. 168/5=33.6 | Total Students: 5  Average Credit Hours: 9.6  Average Study Hours: 33.6 |
| 2) 4 | 2) 39/4=9.75 | 2) 150/4=37.5 | Total Students: 4  Average Credit Hours: 9.75  Average Study Hours: 37.5 |
| 3) 3 | 3) 39/3=13 | 3) 195/3=65 | Total Students: 3  Average Credit Hours: 13  Average Study Hours: 65 |
| 4) 2 | 4) 27/2=13.5 | 4) 81/2=40.5 | Total Students: 2  Average Credit Hours: 13.5  Average Study Hours: 40.5 |
| 5) 1 | 5) 12/1=12 | 5) 60/1=60 | Total Students: 1  Average Credit Hours: 12  Average Study Hours: 60 |

**FLOWCHART**



**TEST DATA EXECUTION RESULTS**

#################################### TEST 1 ##################################

Hello Students!

---------------

Thank you for choosing our school to advance your education.

This program was made by Jeremy Bargy.

Instructions

------------

The program being used is designed to help students identify their study needs for this semester.

A student with this information can build and develop their own study habits to meet their academic goals.

Here is a list of how to use this program:

1) The program will ask users if this is data to enter. Data will be entered one user at a time.

a: You will enter a "y" or "Y" for Yes and the program will continue to ask for your information.

b: You will enter a "n" or "N" for No and the program will enter the next sequence.

2) The program will ask users for their first name.

a: Be sure to enter letters for your name and not leave an empty box.

3) The program will ask users for their last name.

a: Be sure to enter letters for your name and not leave an empty box.

4) The program will ask users to enter their credit hours they are enrolled in.

a: Be sure to enter in a positive number.

b: Be sure to enter a number that equals credit hours for one standard class.

c: 1 class is equal to 3 credit hours. 4 classes is equal to 12 credit hours.

5) The program will ask users for the grade they are aiming to achieve.

a: The program assumes that grade is the same for all the classes a user is enrolled in.

b: Be sure to entered letters for value and not null value

c: Letter grade entered must correspond with standard grading scales. i.e. A,B,C,D, or F

6) The program will ask if there is another student to enter their data.

a: You will enter a "y" or "Y" for Yes and the program will continue to ask for your information.

b: You will enter a "n" or "N" for No and the program will enter the next sequence.

Take a minute to ready through the instructions before you begin.

Have you read the instructions and are ready to begin?

Enter "Y" for yes. Please use capital letters.

Or enter "N" for no. Please use capital letters.

Begin program? n

Error: please read the instructions and enter "Y" for yes to begin:

Begin program?

y

Please enter your first name:

Jeremy

Please enter your last name:

Bargy

Please enter the credit hours you are currently enrolled in. i.e. 1 class will be entered as 3 credit hours:

12

Please enter the grade you wish to earn. i.e. A,B,C,D, or F:

A

Study Time Info for:

--------------------

Student Name: | Jeremy Bargy

Credits: | 12

Study Hours: | 60.0

Grade: | A

Is there another student who has data to enter?

Enter "Y" for yes. Please use capital letters.

Or enter "N" for no. Please use capital letters.

Another user? y

Please enter your first name:

Jessie

Please enter your last name:

Cork

Please enter the credit hours you are currently enrolled in. i.e. 1 class will be entered as 3 credit hours:

15

Please enter the grade you wish to earn. i.e. A,B,C,D, or F:

b

Study Time Info for:

--------------------

Student Name: | Jessie Cork

Credits: | 15

Study Hours: | 60.0

Grade: | B

Is there another student who has data to enter?

Enter "Y" for yes. Please use capital letters.

Or enter "N" for no. Please use capital letters.

Another user? y

Please enter your first name:

Steven

Please enter your last name:

Thomas

Please enter the credit hours you are currently enrolled in. i.e. 1 class will be entered as 3 credit hours:

12

Please enter the grade you wish to earn. i.e. A,B,C,D, or F:

C

Study Time Info for:

--------------------

Student Name: | Steven Thomas

Credits: | 12

Study Hours: | 36.0

Grade: | C

Is there another student who has data to enter?

Enter "Y" for yes. Please use capital letters.

Or enter "N" for no. Please use capital letters.

Another user? y

Please enter your first name:

Tyler

Please enter your last name:

Reyes

Please enter the credit hours you are currently enrolled in. i.e. 1 class will be entered as 3 credit hours:

6

Please enter the grade you wish to earn. i.e. A,B,C,D, or F:

D

Study Time Info for:

--------------------

Student Name: | Tyler Reyes

Credits: | 6

Study Hours: | 12.0

Grade: | D

Is there another student who has data to enter?

Enter "Y" for yes. Please use capital letters.

Or enter "N" for no. Please use capital letters.

Another user? y

Please enter your first name:

Sammie

Please enter your last name:

Taylor

Please enter the credit hours you are currently enrolled in. i.e. 1 class will be entered as 3 credit hours:

3

Please enter the grade you wish to earn. i.e. A,B,C,D, or F:

F

Study Time Info for:

--------------------

Student Name: | Sammie Taylor

Credits: | 3

Study Hours: | 0.0

Grade: | F

Is there another student who has data to enter?

Enter "Y" for yes. Please use capital letters.

Or enter "N" for no. Please use capital letters.

Another user? n

Group Study Info:

------------------

Total Number of Students: | 5

Average Credit Hours: | 9.6

Average Study Hours: | 33.6

Would you like to restart this program?

Please enter "Y" to restart program.

Or "N" to end the program: n

Thank you for using our program.

Good luck this semester!

>>>

#################################### TEST 2 ##################################

**Hello Students!**

**---------------**

**Thank you for choosing our school to advance your education.**

**This program was made by Jeremy Bargy.**

**Instructions**

**------------**

**The program being used is designed to help students identify their study needs for this semester.**

**A student with this information can build and develop their own study habits to meet their academic goals.**

**Here is a list of how to use this program:**

**1) The program will ask users if this is data to enter. Data will be entered one user at a time.**

**a: You will enter a "y" or "Y" for Yes and the program will continue to ask for your information.**

**b: You will enter a "n" or "N" for No and the program will enter the next sequence.**

**2) The program will ask users for their first name.**

**a: Be sure to enter letters for your name and not leave an empty box.**

**3) The program will ask users for their last name.**

**a: Be sure to enter letters for your name and not leave an empty box.**

**4) The program will ask users to enter their credit hours they are enrolled in.**

**a: Be sure to enter in a positive number.**

**b: Be sure to enter a number that equals credit hours for one standard class.**

**c: 1 class is equal to 3 credit hours. 4 classes is equal to 12 credit hours.**

**5) The program will ask users for the grade they are aiming to achieve.**

**a: The program assumes that grade is the same for all the classes a user is enrolled in.**

**b: Be sure to entered letters for value and not null value**

**c: Letter grade entered must correspond with standard grading scales. i.e. A,B,C,D, or F**

**6) The program will ask if there is another student to enter their data.**

**a: You will enter a "y" or "Y" for Yes and the program will continue to ask for your information.**

**b: You will enter a "n" or "N" for No and the program will enter the next sequence.**

**Take a minute to ready through the instructions before you begin.**

**Have you read the instructions and are ready to begin?**

**Enter "Y" for yes. Please use capital letters.**

**Or enter "N" for no. Please use capital letters.**

**Begin program? y**

**Please enter your first name:**

**4**

**Error: incorrect input:**

**Please your first name:**

**Jeremy**

**Please enter your last name:**

**Bargy**

**Please enter the credit hours you are currently enrolled in. i.e. 1 class will be entered as 3 credit hours:**

**15**

**Please enter the grade you wish to earn. i.e. A,B,C,D, or F:**

**B**

**Study Time Info for:**

**--------------------**

**Student Name: | Jeremy Bargy**

**Credits: | 15**

**Study Hours: | 60.0**

**Grade: | B**

**Is there another student who has data to enter?**

**Enter "Y" for yes. Please use capital letters.**

**Or enter "N" for no. Please use capital letters.**

**Another user? y**

**Please enter your first name:**

**Taylor**

**Please enter your last name:**

**Sammy**

**Please enter the credit hours you are currently enrolled in. i.e. 1 class will be entered as 3 credit hours:**

**12**

**Please enter the grade you wish to earn. i.e. A,B,C,D, or F:**

**c**

**Study Time Info for:**

**--------------------**

**Student Name: | Taylor Sammy**

**Credits: | 12**

**Study Hours: | 36.0**

**Grade: | C**

**Is there another student who has data to enter?**

**Enter "Y" for yes. Please use capital letters.**

**Or enter "N" for no. Please use capital letters.**

**Another user? y**

**Please enter your first name:**

**Ryan**

**Please enter your last name:**

**Reyes**

**Please enter the credit hours you are currently enrolled in. i.e. 1 class will be entered as 3 credit hours:**

**6**

**Please enter the grade you wish to earn. i.e. A,B,C,D, or F:**

**a**

**Study Time Info for:**

**--------------------**

**Student Name: | Ryan Reyes**

**Credits: | 6**

**Study Hours: | 30.0**

**Grade: | A**

**Is there another student who has data to enter?**

**Enter "Y" for yes. Please use capital letters.**

**Or enter "N" for no. Please use capital letters.**

**Another user? y**

**Please enter your first name:**

**Kimmy**

**Please enter your last name:**

**Flowers**

**Please enter the credit hours you are currently enrolled in. i.e. 1 class will be entered as 3 credit hours:**

**6**

**Please enter the grade you wish to earn. i.e. A,B,C,D, or F:**

**b**

**Study Time Info for:**

**--------------------**

**Student Name: | Kimmy Flowers**

**Credits: | 6**

**Study Hours: | 24.0**

**Grade: | B**

**Is there another student who has data to enter?**

**Enter "Y" for yes. Please use capital letters.**

**Or enter "N" for no. Please use capital letters.**

**Another user? n**

**Group Study Info:**

**------------------**

**Total Number of Students: | 4**

**Average Credit Hours: | 9.75**

**Average Study Hours: | 37.5**

**Would you like to restart this program?**

**Please enter "Y" to restart program.**

**Or "N" to end the program: n**

**Thank you for using our program.**

**Good luck this semester!**

**>>>**

#################################### TEST 3 ##################################

*Hello Students!*

*---------------*

*Thank you for choosing our school to advance your education.*

*This program was made by Jeremy Bargy.*

*Instructions*

*------------*

*The program being used is designed to help students identify their study needs for this semester.*

*A student with this information can build and develop their own study habits to meet their academic goals.*

*Here is a list of how to use this program:*

*1) The program will ask users if this is data to enter. Data will be entered one user at a time.*

*a: You will enter a "y" or "Y" for Yes and the program will continue to ask for your information.*

*b: You will enter a "n" or "N" for No and the program will enter the next sequence.*

*2) The program will ask users for their first name.*

*a: Be sure to enter letters for your name and not leave an empty box.*

*3) The program will ask users for their last name.*

*a: Be sure to enter letters for your name and not leave an empty box.*

*4) The program will ask users to enter their credit hours they are enrolled in.*

*a: Be sure to enter in a positive number.*

*b: Be sure to enter a number that equals credit hours for one standard class.*

*c: 1 class is equal to 3 credit hours. 4 classes is equal to 12 credit hours.*

*5) The program will ask users for the grade they are aiming to achieve.*

*a: The program assumes that grade is the same for all the classes a user is enrolled in.*

*b: Be sure to entered letters for value and not null value*

*c: Letter grade entered must correspond with standard grading scales. i.e. A,B,C,D, or F*

*6) The program will ask if there is another student to enter their data.*

*a: You will enter a "y" or "Y" for Yes and the program will continue to ask for your information.*

*b: You will enter a "n" or "N" for No and the program will enter the next sequence.*

*Take a minute to ready through the instructions before you begin.*

*Have you read the instructions and are ready to begin?*

*Enter "Y" for yes. Please use capital letters.*

*Or enter "N" for no. Please use capital letters.*

*Begin program? y*

*Please enter your first name:*

*Tony*

*Please enter your last name:*

*Error: incorrect input:*

*Please your last name:*

*Gaddis*

*Please enter the credit hours you are currently enrolled in. i.e. 1 class will be entered as 3 credit hours:*

*9*

*Please enter the grade you wish to earn. i.e. A,B,C,D, or F:*

*a*

*Study Time Info for:*

*--------------------*

*Student Name: | Tony Gaddis*

*Credits: | 9*

*Study Hours: | 45.0*

*Grade: | A*

*Is there another student who has data to enter?*

*Enter "Y" for yes. Please use capital letters.*

*Or enter "N" for no. Please use capital letters.*

*Another user? y*

*Please enter your first name:*

*Wendy*

*Please enter your last name:*

*Payne*

*Please enter the credit hours you are currently enrolled in. i.e. 1 class will be entered as 3 credit hours:*

*15*

*Please enter the grade you wish to earn. i.e. A,B,C,D, or F:*

*A*

*Study Time Info for:*

*--------------------*

*Student Name: | Wendy Payne*

*Credits: | 15*

*Study Hours: | 75.0*

*Grade: | A*

*Is there another student who has data to enter?*

*Enter "Y" for yes. Please use capital letters.*

*Or enter "N" for no. Please use capital letters.*

*Another user? y*

*Please enter your first name:*

*Tony*

*Please enter your last name:*

*Hawk*

*Please enter the credit hours you are currently enrolled in. i.e. 1 class will be entered as 3 credit hours:*

*15*

*Please enter the grade you wish to earn. i.e. A,B,C,D, or F:*

*a*

*Study Time Info for:*

*--------------------*

*Student Name: | Tony Hawk*

*Credits: | 15*

*Study Hours: | 75.0*

*Grade: | A*

*Is there another student who has data to enter?*

*Enter "Y" for yes. Please use capital letters.*

*Or enter "N" for no. Please use capital letters.*

*Another user? n*

*Group Study Info:*

*------------------*

*Total Number of Students: | 3*

*Average Credit Hours: | 13.0*

*Average Study Hours: | 65.0*

*Would you like to restart this program?*

*Please enter "Y" to restart program.*

*Or "N" to end the program: n*

*Thank you for using our program.*

*Good luck this semester!*

#################################### TEST 4 ##################################

Hello Students!

---------------

Thank you for choosing our school to advance your education.

This program was made by Jeremy Bargy.

Instructions

------------

The program being used is designed to help students identify their study needs for this semester.

A student with this information can build and develop their own study habits to meet their academic goals.

Here is a list of how to use this program:

1) The program will ask users if this is data to enter. Data will be entered one user at a time.

a: You will enter a "y" or "Y" for Yes and the program will continue to ask for your information.

b: You will enter a "n" or "N" for No and the program will enter the next sequence.

2) The program will ask users for their first name.

a: Be sure to enter letters for your name and not leave an empty box.

3) The program will ask users for their last name.

a: Be sure to enter letters for your name and not leave an empty box.

4) The program will ask users to enter their credit hours they are enrolled in.

a: Be sure to enter in a positive number.

b: Be sure to enter a number that equals credit hours for one standard class.

c: 1 class is equal to 3 credit hours. 4 classes is equal to 12 credit hours.

5) The program will ask users for the grade they are aiming to achieve.

a: The program assumes that grade is the same for all the classes a user is enrolled in.

b: Be sure to entered letters for value and not null value

c: Letter grade entered must correspond with standard grading scales. i.e. A,B,C,D, or F

6) The program will ask if there is another student to enter their data.

a: You will enter a "y" or "Y" for Yes and the program will continue to ask for your information.

b: You will enter a "n" or "N" for No and the program will enter the next sequence.

Take a minute to ready through the instructions before you begin.

Have you read the instructions and are ready to begin?

Enter "Y" for yes. Please use capital letters.

Or enter "N" for no. Please use capital letters.

Begin program? j

Error: please read the instructions and enter "Y" for yes to begin:

Begin program?

y

Please enter your first name:

Bush

Please enter your last name:

Williams

Please enter the credit hours you are currently enrolled in. i.e. 1 class will be entered as 3 credit hours:

21

Error: incorrect input:

Please enter the credit hours you are currently enrolled in. i.e. Must be between 1 and 6 classes. Or as required, 3 - 18 credit hours.

12

Please enter the grade you wish to earn. i.e. A,B,C,D, or F:

c

Study Time Info for:

--------------------

Student Name: | Bush Williams

Credits: | 12

Study Hours: | 36.0

Grade: | C

Is there another student who has data to enter?

Enter "Y" for yes. Please use capital letters.

Or enter "N" for no. Please use capital letters.

Another user? y

Please enter your first name:

Karen

Please enter your last name:

Manager

Please enter the credit hours you are currently enrolled in. i.e. 1 class will be entered as 3 credit hours:

15

Please enter the grade you wish to earn. i.e. A,B,C,D, or F:

C

Study Time Info for:

--------------------

Student Name: | Karen Manager

Credits: | 15

Study Hours: | 45.0

Grade: | C

Is there another student who has data to enter?

Enter "Y" for yes. Please use capital letters.

Or enter "N" for no. Please use capital letters.

Another user? n

Group Study Info:

------------------

Total Number of Students: | 2

Average Credit Hours: | 13.5

Average Study Hours: | 40.5

Would you like to restart this program?

Please enter "Y" to restart program.

Or "N" to end the program: n

Thank you for using our program.

Good luck this semester!

>>>

#################################### TEST 5 ##################################

**Hello Students!**

**---------------**

**Thank you for choosing our school to advance your education.**

**This program was made by Jeremy Bargy.**

**Instructions**

**------------**

**The program being used is designed to help students identify their study needs for this semester.**

**A student with this information can build and develop their own study habits to meet their academic goals.**

**Here is a list of how to use this program:**

**1) The program will ask users if this is data to enter. Data will be entered one user at a time.**

**a: You will enter a "y" or "Y" for Yes and the program will continue to ask for your information.**

**b: You will enter a "n" or "N" for No and the program will enter the next sequence.**

**2) The program will ask users for their first name.**

**a: Be sure to enter letters for your name and not leave an empty box.**

**3) The program will ask users for their last name.**

**a: Be sure to enter letters for your name and not leave an empty box.**

**4) The program will ask users to enter their credit hours they are enrolled in.**

**a: Be sure to enter in a positive number.**

**b: Be sure to enter a number that equals credit hours for one standard class.**

**c: 1 class is equal to 3 credit hours. 4 classes is equal to 12 credit hours.**

**5) The program will ask users for the grade they are aiming to achieve.**

**a: The program assumes that grade is the same for all the classes a user is enrolled in.**

**b: Be sure to entered letters for value and not null value**

**c: Letter grade entered must correspond with standard grading scales. i.e. A,B,C,D, or F**

**6) The program will ask if there is another student to enter their data.**

**a: You will enter a "y" or "Y" for Yes and the program will continue to ask for your information.**

**b: You will enter a "n" or "N" for No and the program will enter the next sequence.**

**Take a minute to ready through the instructions before you begin.**

**Have you read the instructions and are ready to begin?**

**Enter "Y" for yes. Please use capital letters.**

**Or enter "N" for no. Please use capital letters.**

**Begin program? y**

**Please enter your first name:**

**Pacifica**

**Please enter your last name:**

**Long**

**Please enter the credit hours you are currently enrolled in. i.e. 1 class will be entered as 3 credit hours:**

**12**

**Please enter the grade you wish to earn. i.e. A,B,C,D, or F:**

**E**

**Error: incorrect input:**

**Please enter the grade you wish to earn:**

**A**

**Study Time Info for:**

**--------------------**

**Student Name: | Pacifica Long**

**Credits: | 12**

**Study Hours: | 60.0**

**Grade: | A**

**Is there another student who has data to enter?**

**Enter "Y" for yes. Please use capital letters.**

**Or enter "N" for no. Please use capital letters.**

**Another user? n**

**Group Study Info:**

**------------------**

**Total Number of Students: | 1**

**Average Credit Hours: | 12.0**

**Average Study Hours: | 60.0**

**Would you like to restart this program?**

**Please enter "Y" to restart program.**

**Or "N" to end the program: n**

**Thank you for using our program.**

**Good luck this semester!**

**>>>**