

Assignment #2: Family Feud (Due Tuesday, November 15th @11:59pm via Canvas)

Scenario: Write a class named GameShow that contains one data attribute *name* and its appropriate methods/functions. Next, create a derived class named FamilyFeud that contains one data attribute *points* and its appropriate methods/functions.

Functionality: In an effort to imitate the functionality of the actual gameshow *Family Feud*, you will need to create a test class that consists of four rounds. The user will receive a question at random (using the `rand()`) for each of the four rounds (there are 10 questions that will need to be selected at random, these questions should be clustered into their assigned round – see the *Corresponding Question* doc for further details). Based on the question the user is given, your program should read in the corresponding text file that contains a list of answers and their respective points (you can retrieve and view all 10 text files in Canvas). **Refer to Corresponding Questions.txt for clarity regarding what question should be assigned to a designated text file. Also, make sure you pay close attention to the assigned rounds for each text file, respectively.** A round is completed if: **1)** the user successfully guesses all of the answers listed in the text file or **2)** the user receives 3 strikes due to 3 instances of providing an incorrect answer (as seen on the actual gameshow). After all four rounds are concluded, your program should tally up the total points acquired by the user (also note for Rounds 3 and 4 the points are doubled and tripled, respectively). Finally, your program should determine whether or not the user's final score is ≥ 500 , if so then the user will proceed to the Fast Money round, otherwise the game ends. *For this program, do NOT worry about developing any code to reflect the Fast Money round.*

Ideal Output: If your code is written correctly, your program should resemble the following output scenario:

```
Enter name of contestant: Edward
WELCOME Edward!, let's get ready to play the FEUD!!!
ROUND 1
TOP 7 ANSWERS ON THE BOARD: Name a fruit you might eat in the morning:

Answer: █
```

ROUND 1 –EXAMPLE SCENARIO:

```
ROUND 1
TOP 7 ANSWERS ON THE BOARD: Name a fruit you might eat in the morning:

Answer: APPLE
CORRECT ANSWER!!! 15 points

Answer: MELON
CORRECT ANSWER!!! 3 points

Answer: GRAPEFRUIT
CORRECT ANSWER!!! 22 points

Answer: GRAPES
STRIKE 1

Answer: BANANA
CORRECT ANSWER!!! 25 points

Answer: KIWI
STRIKE 2

Answer: STRAWBERRY
CORRECT ANSWER!!! 19 points

Answer: PEACH
CORRECT ANSWER!!! 2 points

Answer: PEAR
STRIKE 3

SORRY YOU HAVE 3 STRIKES, ROUND 1 OVER
Total Points for Round 1: 86

Edward, get ready for ROUND 2!!!
```

ROUND 2 – EXAMPLE SCENARIO:

```
ROUND 2
TOP 6 ANSWERS ON THE BOARD: Name a common candy bar ingredient:

Answer: CHOCOLATE
CORRECT ANSWER!!! 36 points

Answer: PEANUTS
CORRECT ANSWER!!! 22 points

Answer: COCONUT
CORRECT ANSWER!!! 6 points

Answer: NOUGAT
CORRECT ANSWER!!! 10 points

Answer: CAMEL
CORRECT ANSWER!!! 15 points

Answer: ALMONDS
CORRECT ANSWER!!! 12 points

CONGRATULATIONS YOU SWEEP THE BOARD, ROUND 2 OVER
Total Points for Round 2: 101

Edward, get ready for ROUND 3!!!
```

ROUND 3 – EXAMPLE SCENARIO:

```
ROUND 3 – DOUBLE THE POINT VALUE
TOP 6 ANSWERS ON THE BOARD: Name something that breaks down:

Answer: CAR
CORRECT ANSWER!!! 88 points

Answer: BODY
CORRECT ANSWER!!! 44 points

Answer: TV
CORRECT ANSWER!!! 4 points

Answer: COMMUNICATION
CORRECT ANSWER!!! 14 points

Answer: PEOPLE
CORRECT ANSWER!!! 4 points

Answer: COMPUTER
CORRECT ANSWER!!! 34 points

CONGRATULATIONS YOU SWEEP THE BOARD, ROUND 3 OVER
Total Points for Round 3: 188

Edward, get ready for ROUND 4!!!
```

ROUND 4 – EXAMPLE SCENARIO:

```
ROUND 4 – TRIPLE THE POINT VALUE
TOP 6 ANSWERS ON THE BOARD: Name a type of bear:

Answer: BROWN
CORRECT ANSWER!!! 12 points

Answer: GRIZZLY
CORRECT ANSWER!!! 81 points

Answer: BLACK
CORRECT ANSWER!!! 9 points

Answer: POLAR
CORRECT ANSWER!!! 66 points

Answer: TEDDY
CORRECT ANSWER!!! 30 points

Answer: COUNTRY
STRIKE 1

Answer: FLUFFY
STRIKE 2

Answer: FUZZY
STRIKE 3

SORRY YOU HAVE 3 STRIKES, ROUND 4 OVER
Total Points for Round 4: 198
```

TOTAL POINTS SCENARIO:

If points < 500:

```
GAME TOTAL: 487
```

```
SORRY Edward, you do not have enough points to move on to the Fast Money Round
```

If points >= 500:

```
GAME TOTAL: 670
```

```
CONGRATULATIONS Edward!!! You move on to the FAST MONEY ROUND!!!
```

- ❖ **This assignment is worth 100 points Please submit your .h and .cpp file(s) to Canvas. (DO NOT EMAIL YOUR CODE TO ME OR DO NOT USE ANY OTHER FILE EXTENSION TO SUBMIT YOUR CODE).**