PPL Assignment

API Documentation

February 26, 2017

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Class boyGeek Module boyGeek

1 Module boyGeek

1.1 Variables

| Name | Description |
|---------|-------------|
| package | Value: None |

1.2 Class boyGeek

1.2.1 Methods

| init(self, boy) | | |
|--|--|--|
| | | |
| ${\bf happinessCalculator}(self,\ gIntelligence)$ | | |
| | | |
| $\mathbf{gifting}(self, gMaintainanceCost, Gifts, giftBasket)$ | | |

| Name | Description |
|-------------|-------------|
| happiness | Value: 0 |
| amountSpent | Value: 0 |
| gfName | Value: '' |

2 Module boyGenerous

2.1 Variables

| Name | Description |
|---------|-------------|
| package | Value: None |

2.2 Class boyGenerous

2.2.1 Methods

| init(self, boy) | |
|---|--|
| | |
| ${\bf happinessCalculator}(self,\ gHappiness)$ | |
| | |
| gifting(self, gMaintainanceCost, Gifts, giftBasket) | |

| Name | Description |
|-------------|-------------|
| happiness | Value: 0 |
| amountSpent | Value: 0 |
| gfName | Value: '' |

Class boyMiser Module boyMiser

3 Module boyMiser

3.1 Variables

| Name | Description |
|---------|-------------|
| package | Value: None |

3.2 Class boyMiser

3.2.1 Methods

| init(self, boy) |
|---|
| |
| $\mathbf{gifting}(self, gMaintain ance Cost, Gifts, giftBasket)$ |
| |
| ${\bf happinessCalculator}(self)$ |

| Name | Description |
|-------------|-------------|
| happiness | Value: 0 |
| amountSpent | Value: 0 |
| gfName | Value: '' |

Class couple Module couple

4 Module couple

4.1 Variables

| Name | Description |
|---------|-------------|
| package | Value: None |

4.2 Class couple

| init(self, boy, girl) | |
|--|--|
| ${\bf happinessCalcuator}(\textit{self}, \textit{boy}, \textit{girl})$ | |
| compatibilityCalculator(self, boy, girl) | |

${\bf 5}\quad {\bf Module\ couple Maker}$

5.1 Variables

| Name | Description |
|----------|-------------|
| Couples | Value: [] |
| Gifts | Value: [] |
| package | Value: None |
| arrBoys | Value: [] |
| arrGirls | Value: [] |

5.2 Class coupleMaker

| $\boxed{\mathbf{makeCouples}(\mathit{self})}$ |
|--|
| Make Couples and print the gifting details of each |

| $\mathbf{getMostHappy}(\mathit{self},k)$ |
|--|
| Prints the k most happy Couples |

| ${\bf getMostCompatible}(\mathit{self},k)$ | |
|--|--|
| Prints the k most compatible couples | |

6 Module driver

6.1 Functions

| generateRandomIn | nut | \cap |
|--------------------|-----|--------|
| generaterrandonnin | puu | ٠. |

Can be used to generate random Inputs

Class randomGenerator Module generator

7 Module generator

7.1 Variables

| Name | Description |
|---------|-------------|
| package | Value: None |

7.2 Class randomGenerator

| init(self, totalBoys, totalGirls, totalGifts) |
|---|
| |
| $oxed{generateBoys}(self)$ |
| |
| $\boxed{\mathbf{generateGirls}(\mathit{self})}$ |
| |
| $\boxed{\mathbf{generateGifts}(\mathit{self})}$ |

Class giftEssential Module giftEssential

8 Module giftEssential

8.1 Variables

| Name | Description |
|---------|-------------|
| package | Value: None |

8.2 Class giftEssential



Class giftLuxury Module giftLuxury

9 Module giftLuxury

9.1 Variables

| Name | Description |
|---------|-------------|
| package | Value: None |

9.2 Class giftLuxury

9.2.1 Methods

| init(self, gift) | |
|------------------|--|
|------------------|--|

| Name | Description |
|--------------|-------------|
| luxuryRating | Value: 0 |
| obtainDiff | Value: 0 |

Class giftUtility Module giftUtility

10 Module giftUtility

10.1 Variables

| Name | Description |
|---------|-------------|
| package | Value: None |

10.2 Class giftUtility

10.2.1 Methods

| $_$ init $_$ (self, gift) | |
|-----------------------------|--|
|-----------------------------|--|

| Name | Description |
|--------------|-------------|
| utilityClass | Value: None |
| utilityValue | Value: 0 |

Class girlChoosy Module girlChoosy

11 Module girlChoosy

11.1 Variables

| Name | Description |
|---------|-------------|
| package | Value: None |

11.2 Class girlChoosy

11.2.1 Methods

| init(self, girl) |
|------------------|
|------------------|

happinessCalculator(self, giftBasket, amount)

| Name | Description |
|----------------|-------------|
| happiness | Value: 0 |
| costOfGiftsRec | Value: 0 |
| bfName | Value: '' |

12 Module girlDesperate

12.1 Variables

| Name | Description |
|---------|-------------|
| package | Value: None |

12.2 Class girlDesperate

12.2.1 Methods

| init(self, girl) |
|------------------|
|------------------|

happinessCalculator(self, giftBasket, amount)

| Name | Description |
|----------------|-------------|
| happiness | Value: 0 |
| costOfGiftsRec | Value: 0 |
| bfName | Value: '' |

Class girlNormal Module girlNormal

13 Module girlNormal

13.1 Variables

| Name | Description |
|---------|-------------|
| package | Value: None |

13.2 Class girlNormal

13.2.1 Methods

| init(self, girl) |
|------------------|
|------------------|

happinessCalculator(self, giftBasket, amount)

| Name | Description |
|----------------|-------------|
| happiness | Value: 0 |
| costOfGiftsRec | Value: 0 |
| bfName | Value: '' |

14 Module q1

Writes the couple formation event into log file

14.1 Functions

| allocate() | |
|-------------------------|--|
| Allocates boys to girls | |
| | |
| printCouples() | |
| Prints Couples formed | |
| | |
| $\mathbf{performLog}()$ | |

Class read Module reader

15 Module reader

15.1 Variables

| Name | Description |
|----------|-------------|
| arrBoys | Value: [] |
| arrGirls | Value: [] |
| Gifts | Value: [] |
| package | Value: None |

15.2 Class read

| $\mathbf{init}_{}(\mathit{self})$ |
|-----------------------------------|
|-----------------------------------|

| readcsvfile(self, charType) |
|-----------------------------|
|-----------------------------|

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