PPL Assignment

API Documentation

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Class allocate Module allocate

1 Module allocate

1.1 Variables

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

1.2 Class allocate

alloc(self)
Allocates boys to girls

$\mathbf{printCouples}(\mathit{self})$	
Prints Couples formed	

$\mathbf{performLog}(self)$	
Writes the couple formation event into log file	

Class boyGeek Module boyGeek

2 Module boyGeek

2.1 Variables

Name	Description
package	Value: None

2.2 Class boyGeek

2.2.1 Methods

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

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

3 Module boyGenerous

3.1 Variables

Name	Description
package	Value: None

3.2 Class boyGenerous

3.2.1 Methods

init(self, boy)	
happinessCalculator(self, gHappiness)	
gifting(self, gMaintainanceCost, Gifts, giftBasket)	

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

Class boyMiser Module boyMiser

4 Module boyMiser

4.1 Variables

Name	Description
package	Value: None

4.2 Class boyMiser

4.2.1 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

5 Module couple

5.1 Variables

Name	Description
package	Value: None

5.2 Class couple

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

6 Module coupleMaker

6.1 Variables

Name	Description
Couples	Value: []
Gifts	Value: []
_package	Value: None
arrBoys	Value: []
arrGirls	Value: []

6.2 Class coupleMaker

$\mathbf{makeCouples}(self)$	
Makes Couples and prints the gifting details of each	

getMostHappy(self, k)
Prints the k most happy Couples

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

7 Module driver

7.1 Functions

${\bf generateRandomInput}()$
Can be used to generate random Inputs

Class randomGenerator Module generator

8 Module generator

8.1 Variables

Name	Description
package	Value: None

8.2 Class randomGenerator

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

Class giftEssential Module giftEssential

9 Module giftEssential

9.1 Variables

Name	Description
package	Value: None

9.2 Class giftEssential

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

Class giftLuxury Module giftLuxury

10 Module giftLuxury

10.1 Variables

Name	Description
package	Value: None

10.2 Class giftLuxury

10.2.1 Methods

$_$ init $_$ (self, gift)	
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Name	Description
luxuryRating	Value: 0
obtainDiff	Value: 0

Class giftUtility Module giftUtility

11 Module giftUtility

11.1 Variables

Name	Description
package	Value: None

11.2 Class giftUtility

11.2.1 Methods

```
__init__(self, gift)
```

Name	Description
utilityClass	Value: None
utilityValue	Value: 0

Class girlChoosy Module girlChoosy

12 Module girlChoosy

12.1 Variables

Name	Description
package	Value: None

12.2 Class girlChoosy

12.2.1 Methods

init(self, girl)

happinessCalculator(self, giftBasket, amount)

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

13 Module girlDesperate

13.1 Variables

Name	Description
package	Value: None

13.2 Class girlDesperate

13.2.1 Methods

init(self, girl)

happinessCalculator(self, giftBasket, amount)

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

Class girlNormal Module girlNormal

14 Module girlNormal

14.1 Variables

Name	Description
package	Value: None

14.2 Class girlNormal

14.2.1 Methods

init(self, girl)

happinessCalculator(self, giftBasket, amount)

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

15 Module q1

15.1 Functions

 $\mathbf{main}()$

$16 \quad Module \ q2$

16.1 Functions

main()

Class read Module reader

17 Module reader

17.1 Variables

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

17.2 Class read

init(self)	
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