

Question2

API Documentation

February 25, 2017

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1 Module boy

1.1 Variables

| Name | Description |
|--------------------------|--------------------|
| <code>__package__</code> | Value: None |

1.2 Class Boy

defines a Boy

1.2.1 Methods

| |
|---|
| <code>__init__</code> (<i>self</i> , <i>name</i> , <i>attr_rating</i> , <i>budget</i> , <i>intel_level</i> , <i>attr_requirement</i> , <i>types</i>) |
| initialises attributes |

| |
|--|
| <code>isEligible</code> (<i>self</i> , <i>girl</i>) |
| test if a girl is eligible for a particular boy |

| |
|---|
| <code>checkStatus</code> (<i>self</i>) |
| check status of a boy |

| |
|--|
| <code>changeStatus</code> (<i>self</i>) |
| changes status of a girl |

| |
|---|
| <code>giftMiser</code> (<i>self</i> , <i>girl</i> , <i>gift</i>) |
| calculates returns gifts that a miser boy will give |

| |
|--|
| <code>giftGenerous</code> (<i>self</i> , <i>girl</i> , <i>gift</i>) |
| calculates returns gifts that a generous boy will give |

| |
|---|
| <code>giftGeeks</code> (<i>self</i> , <i>girl</i> , <i>gift</i>) |
| calculates returns gifts that a geek boy will give |

1.2.2 Class Variables

| Name | Description |
|-------------------------|-----------------|
| <code>boy_number</code> | Value: 0 |

2 Module driver

2.1 Functions

calGift(*girl*, *boy*, *gift*)

returns gift list for a particular couple

calGirlHappiness(*girl*, *gift*)

calculates girl's hapiness

calBoyHappiness(*girl*, *boy*, *gift*)

calculate boy's happiness

2.2 Variables

| Name | Description |
|-----------------|---|
| boyscsv | Value: open('boy.csv') |
| girlcsv | Value: open('girl.csv') |
| giftcsv | Value: open('gift.csv') |
| readBoy | Value: <_csv.reader object> |
| readGirl | Value: <_csv.reader object> |
| readGift | Value: <_csv.reader object> |
| B | Value: [<boy.Boy object>, <boy.Boy object>, <boy.Boy object>, <b... |
| G | Value: [<girl.Girl object>, <girl.Girl object>, <girl.Girl objec... |
| gift | Value: [<gift.Gift object>, <gift.Gift object>, <gift.Gift objec... |
| count | Value: 14 |
| k | Value: 1 |
| C | Value: [(<boy.Boy object>, <girl.Girl object>, [<gift.Gift objec... |
| __package__ | Value: None |
| b | Value: <boy.Boy object> |
| c | Value: (<boy.Boy object>, <girl.Girl object>, [<gift.Gift objec... |
| coupleCompat | Value: 663 |
| coupleHappiness | Value: 0.0 |
| g | Value: <gift.Gift object> |
| giftlist | Value: [<gift.Gift object>, <gift.Gift object>, <gift.Gift objec... |
| i | Value: <gift.Gift object> |
| row | Value: ['Gift9', '69', '48', 'Utiltiy'] |

3 Module generate

3.1 Functions

| |
|---|
| writeToCsv (<i>Data</i> , <i>filename</i>) |
| writes to a csv |

| |
|--|
| generator () |
| generates random data to be written to csv files |

3.2 Variables

| Name | Description |
|--------------------------|--------------------|
| <code>__package__</code> | Value: None |

4 Module gift

4.1 Variables

| Name | Description |
|--------------------------|--------------------|
| <code>__package__</code> | Value: None |

4.2 Class Gift

defines a gift

4.2.1 Methods

| |
|--|
| <code>__init__</code> (<i>self</i> , <i>name</i> , <i>price</i> , <i>value</i> , <i>types</i>) |
|--|

5 Module girl

5.1 Variables

| Name | Description |
|--------------------------|--------------------|
| <code>__package__</code> | Value: None |

5.2 Class Girl

defines a girl

5.2.1 Methods

| |
|--|
| <code>__init__</code> (<i>self</i> , <i>name</i> , <i>attr_rating</i> , <i>main_budget</i> , <i>intel_level</i> , <i>types</i>) |
| initialises attributes |

| |
|---|
| <code>isEligible</code> (<i>self</i> , <i>boy</i>) |
| test if a boy is eligible for a particular girl |

| |
|---|
| <code>checkStatus</code> (<i>self</i>) |
| check status of a girl |

| |
|--|
| <code>changeStatus</code> (<i>self</i>) |
| changes status of a girl |

| |
|---|
| <code>happinessChoosy</code> (<i>self</i> , <i>gift</i>) |
| calculate happiness for a choosy girl |

| |
|---|
| <code>happinessNormal</code> (<i>self</i> , <i>gift</i>) |
| calculate happiness for a normal girl |

| |
|--|
| <code>happinessDesperate</code> (<i>self</i> , <i>gift</i>) |
| calculate happiness for a desperate girl |

5.2.2 Class Variables

| Name | Description |
|--------------------------|-----------------|
| <code>girl_number</code> | Value: 0 |

6 Module logger

6.1 Functions

| |
|--------------------------------|
| logger (<i>write</i>) |
| utility for logging |

6.2 Variables

| Name | Description |
|--------------------------|--------------------|
| <code>__package__</code> | Value: None |

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