

PPL Assignment - Question8

API Documentation

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1 Module boy

1.1 Variables

Name	Description
<code>--package--</code>	Value: None

1.2 Class Boy

Known Subclasses: boy.Geek, boy.Generous, boy.Miser

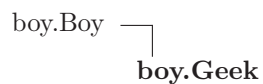
1.2.1 Methods

```
--init__(self, name, attractiveness, budget, intelligence_level, min_attraction_requirement,
committed, happiness)
```

```
isCommitted(self)
```

```
commit(self)
```

1.3 Class Geek



1.3.1 Methods

```
--init__(self, name, attractiveness, budget, intelligence_level, min_attraction_requirement,
committed, happiness)
```

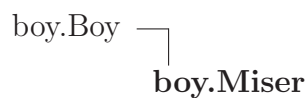
Overrides: boy.Boy.--init--

```
getHappiness(self, girl, total_gifts)
```

Inherited from boy.Boy(Section 1.2)

commit(), isCommitted()

1.4 Class Miser



1.4.1 Methods

```
__init__(self, name, attractiveness, budget, intelligence_level,
min_attraction_requirement, committed, happiness)
```

Overrides: boy.Boy.__init__

```
getHappiness(self, girl, total_gifts)
```

Inherited from boy.Boy(Section 1.2)

commit(), isCommitted()

1.5 Class Generous



1.5.1 Methods

```
__init__(self, name, attractiveness, budget, intelligence_level,
min_attraction_requirement, committed, happiness)
```

Overrides: boy.Boy.__init__

```
getHappiness(self, girl, total_gifts)
```

Inherited from boy.Boy(Section 1.2)

commit(), isCommitted()

2 Module couple

2.1 Variables

Name	Description
<code>--package--</code>	Value: None

2.2 Class Couple

2.2.1 Methods

<code>--init--(self, boy, girl, happiness, compatibility)</code>
--

3 Module gift

3.1 Variables

Name	Description
<code>--package--</code>	Value: None

3.2 Class Gift

Known Subclasses: `gift.essentialGift`, `gift.luxuryGift`, `gift.utilityGift`

3.2.1 Methods

```
--init--(self, price, value, used=False)
```

3.3 Class utilityGift



3.3.1 Methods

```
--init--(self, price, value, used, utility_value, utility_class, Type)  

Overrides: gift.Gift.--init--
```

3.4 Class luxuryGift



3.4.1 Methods

```
--init--(self, price, value, used, difficulty, rating, Type)  

Overrides: gift.Gift.--init--
```

3.5 Class `essentialGift`



3.5.1 Methods

<code>__init__(self, price, value, used, Type)</code>

Overrides: <code>gift.Gift.__init__</code>
--

4 Module girl

4.1 Variables

Name	Description
<code>--package--</code>	Value: None

4.2 Class Girl

Known Subclasses: girl.Choosy, girl.Desperate, girl.Normal

4.2.1 Methods

```
--init__(self, name, attractiveness, maintainance_budget, intelligence_level,
criterion, committed, happiness)
```

```
isCommitted(self)
```

```
commit(self)
```

4.3 Class Choosy



4.3.1 Methods

```
--init__(self, name, attractiveness, maintainance_budget, intelligence_level,
criterion, committed, happiness)
```

Overrides: girl.Girl.--init--

```
getHappiness(self, boy, total_gifts, total_gift_value)
```

Inherited from girl.Girl(Section 4.2)

commit(), isCommitted()

4.4 Class Normal



4.4.1 Methods

```
__init__(self, name, attractiveness, maintainance_budget, intelligence_level,
criterion, committed, happiness)
```

Overrides: girl.Girl.__init__

```
getHappiness(self, boy, total_gifts, total_gift_value)
```

Inherited from girl.Girl(Section 4.2)

commit(), isCommitted()

4.5 Class Desperate



4.5.1 Methods

```
__init__(self, name, attractiveness, maintainance_budget, intelligence_level,
criterion, committed, happiness)
```

Overrides: girl.Girl.__init__

```
getHappiness(self, boy, total_gifts, total_gift_value)
```

Inherited from girl.Girl(Section 4.2)

commit(), isCommitted()

5 Module q10

5.1 Functions

q10()

5.2 Variables

Name	Description
--package--	Value: None

6 Script script-boys_list.txt

7 Script script-couple_list.txt

8 Script script-gift_list.txt

9 Script script-girls_list.txt

10 Module utility

10.1 Functions

```
randomName(size=6, chars= 'ABCDEFGHIJKLMNOPQRSTUVWXYZ')
```

```
generateBoyList()
```

```
generateGirlList()
```

```
generateGiftList()
```

```
makeCouples(mode, boy_list, girl_list, k)
```

```
giveGifts(boy_list, girl_list, k)
```

```
k_most_happy_couples(couple_list)
```

```
k_least_happy_couples(couple_list)
```

```
valentine(k, couple_list, boy_list, girl_list)
```

10.2 Variables

Name	Description
--package--	Value: None

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