

# PPL Assignment - Question7

API Documentation

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# 1 Module ppl-assignment-CosmicCoder96.q7.boy'

## 1.1 Variables

Name	Description
--package--	Value: None

## 1.2 Class Boy

**Known Subclasses:** ppl-assignment-CosmicCoder96.q7.boy.Geek, ppl-assignment-CosmicCoder96.q7.boy.Generous, ppl-assignment-CosmicCoder96.q7.boy.Miser

### 1.2.1 Methods

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

```
commit(self)
```

```
isCommitted(self)
```

## 1.3 Class Geek

```
ppl-assignment-CosmicCoder96.q7.boy.Boy └─ ppl-assignment-CosmicCoder96.q7.boy.Geek
```

### 1.3.1 Methods

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

Overrides: ppl-assignment-CosmicCoder96.q7.boy.Boy.\_\_init\_\_

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

*Inherited from ppl-assignment-CosmicCoder96.q7.boy.Boy(Section 2.2)*

commit(), isCommitted()

## 1.4 Class Generous

ppl-assignment-CosmicCoder96.q7.boy.Boy —| ppl-assignment-CosmicCoder96.q7.boy.Generous

### 1.4.1 Methods

```
__init__(self, name, attractiveness, budget, intelligence_level,
min_attraction_requirement, committed, happiness)
Overrides: ppl-assignment-CosmicCoder96.q7.boy.Boy.__init__
```

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

*Inherited from ppl-assignment-CosmicCoder96.q7.boy.Boy(Section 2.2)*

commit(), isCommitted()

## 1.5 Class Miser

ppl-assignment-CosmicCoder96.q7.boy.Boy —| ppl-assignment-CosmicCoder96.q7.boy.Miser

### 1.5.1 Methods

```
__init__(self, name, attractiveness, budget, intelligence_level,
min_attraction_requirement, committed, happiness)
Overrides: ppl-assignment-CosmicCoder96.q7.boy.Boy.__init__
```

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

*Inherited from ppl-assignment-CosmicCoder96.q7.boy.Boy(Section 2.2)*

commit(), isCommitted()

## 2 Module ppl-assignment-CosmicCoder96.q7.couple'

### 2.1 Variables

Name	Description
<code>--package--</code>	<b>Value:</b> 'ppl-assignment-CosmicCoder96.q7'

### 2.2 Class Boy

**Known Subclasses:** ppl-assignment-CosmicCoder96.q7.boy.Geek, ppl-assignment-CosmicCoder96.q7.boy.ppl-assignment-CosmicCoder96.q7.boy.Miser

#### 2.2.1 Methods

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

```
commit(self)
```

```
isCommitted(self)
```

### 2.3 Class Couple

#### 2.3.1 Methods

```
--init--(self, boy, girl, happiness, compatibility)
```

### 2.4 Class Girl

**Known Subclasses:** ppl-assignment-CosmicCoder96.q7.girl.Choosy, ppl-assignment-CosmicCoder96.q7.girl.ppl-assignment-CosmicCoder96.q7.girl.Normal

#### 2.4.1 Methods

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

**isCommitted**(*self*)

**commit**(*self*)

### 3 Module ppl-assignment-CosmicCoder96.q7.gift'

#### 3.1 Variables

Name	Description
<code>__package__</code>	<b>Value:</b> None

#### 3.2 Class Gift

**Known Subclasses:** ppl-assignment-CosmicCoder96.q7.gift.essentialGift, ppl-assignment-CosmicCoder96.q7.gift.luxuryGift, ppl-assignment-CosmicCoder96.q7.gift.utilityGift

##### 3.2.1 Methods

```
__init__(self, price, value, used=False)
```

#### 3.3 Class essentialGift

```
ppl-assignment-CosmicCoder96.q7.gift.Gift └─ ppl-assignment-CosmicCoder96.q7.gift.essentialGift
```

##### 3.3.1 Methods

```
__init__(self, price, value, used, Type)  
Overrides: ppl-assignment-CosmicCoder96.q7.gift.Gift.__init__
```

#### 3.4 Class luxuryGift

```
ppl-assignment-CosmicCoder96.q7.gift.Gift └─ ppl-assignment-CosmicCoder96.q7.gift.luxuryGift
```

### 3.4.1 Methods

<code>--init__(self, price, value, used, difficulty, rating, Type)</code>
---

Overrides: <code>ppl-assignment-CosmicCoder96.q7.gift.Gift.__init__</code>
--

## 3.5 Class *utilityGift*

`ppl-assignment-CosmicCoder96.q7.gift.Gift` └─ **`ppl-assignment-CosmicCoder96.q7.gift.utilityGift`**

### 3.5.1 Methods

<code>--init__(self, price, value, used, utility_value, utility_class, Type)</code>
---

Overrides: <code>ppl-assignment-CosmicCoder96.q7.gift.Gift.__init__</code>
--



## 4 Module ppl-assignment-CosmicCoder96.q7.girl

### 4.1 Variables

Name	Description
<code>--package--</code>	<b>Value:</b> <code>'ppl-assignment-CosmicCoder96.q7'</code>

### 4.2 Class Girl

**Known Subclasses:** `ppl-assignment-CosmicCoder96.q7.girl.Choosy`, `ppl-assignment-CosmicCoder96.q7.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

```
ppl-assignment-CosmicCoder96.q7.girl.Girl └─ ppl-assignment-CosmicCoder96.q7.girl.Choosy
```

#### 4.3.1 Methods

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

Overrides: `ppl-assignment-CosmicCoder96.q7.girl.Girl.__init__`

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

*Inherited from `ppl-assignment-CosmicCoder96.q7.girl.Girl` (Section 5.3)*

`commit()`, `isCommitted()`

## 4.4 Class Normal



### 4.4.1 Methods

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

Overrides: ppl-assignment-CosmicCoder96.q7.girl.Girl.\_\_init\_\_

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

*Inherited from ppl-assignment-CosmicCoder96.q7.girl.Girl(Section 5.3)*

commit(), isCommitted()

## 4.5 Class Desperate



### 4.5.1 Methods

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

Overrides: ppl-assignment-CosmicCoder96.q7.girl.Girl.\_\_init\_\_

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

*Inherited from ppl-assignment-CosmicCoder96.q7.girl.Girl(Section 5.3)*

commit(), isCommitted()

## 5 Module ppl-assignment-CosmicCoder96.q7.q7'

### 5.1 Functions

```
generateBoyList(file)
```

```
generateGirlList()
```

```
getGF(implement, couple_list, boy_list)
```

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

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

```
q7()
```

### 5.2 Variables

Name	Description
<code>__package__</code>	<b>Value:</b> 'ppl-assignment-CosmicCoder96.q7'

### 5.3 Class Girl

**Known Subclasses:** ppl-assignment-CosmicCoder96.q7.girl.Choosy, ppl-assignment-CosmicCoder96.q7.girl.Normal

#### 5.3.1 Methods

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

```
isCommitted(self)
```

```
commit(self)
```

## 6 Module *ppl-assignment-CosmicCoder96.q7.utility*

### 6.1 Functions

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

```
generateBoyList(file)
```

```
generateGirlList()
```

```
generateGiftList()
```

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

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

```
getGF(implement, couple_list, boy_list)
```

```
binary(b, committedBoys)
```

### 6.2 Variables

Name	Description
<code>--package--</code>	<b>Value:</b> <code>'ppl-assignment-CosmicCoder96.q7'</code>

## 7 Package ppl-assignment-CosmicCoder96.q7'

### 7.1 Modules

- **boy'** (*Section 1, p. 2*)
- **couple'** (*Section 2, p. 4*)
- **gift'** (*Section 3, p. 6*)
- **girl** (*Section 4, p. 8*)
- **q7'** (*Section 5, p. 10*)
- **utility** (*Section 6, p. 11*)

### 7.2 Variables

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

## 8 Script script-boy\_list\_temp.txt

## 9 Script script-boys\_list\_temp.txt

## 10 Script script-boys\_list.txt



## **11 Script script-couple\_list.txt**

## **12 Script script-gift\_list.txt**

## **13 Script script-girls\_list.txt**

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