

Assignment PPL

API Documentation

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1 Module q4_boys

1.1 Variables

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

1.2 Class Boy

boy class for all boys

1.2.1 Methods

<code>__init__</code> (<i>self</i> , <i>name</i> , <i>atr</i> , <i>gfbudget</i> , <i>intelli</i> , <i>min_atr_req</i> , <i>type</i>)
constructor

<code>is_elligible</code> (<i>self</i> , <i>mbudget</i> , <i>atr</i>)
checks the elligibility of a given Girl, for the current instance of Boy class

2 Module q4_couple

2.1 Variables

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

2.2 Class Couple

couple class for all couples

2.2.1 Methods

<code>__init__</code> (<i>self</i> , <i>boy</i> , <i>girl</i>)
constructor

<code>set_happiness</code> (<i>self</i>)
set the happiness of a couple

<code>set_compatibility</code> (<i>self</i>)
set the compatibility of a couple

3 Module q4_driver

3.1 Functions

allocate()

reads and stores the input from the boys.csv and girls.csv files and then makes the valid couples

calculate_happiness(B, G, C)

reads and stores the inputs from the gifts.csv file and sorts the gifts in ascending order of price

hp_miser(GFT, c)

provides gifting logic for Miser type Boys and sets the Happiness of the committed Boy and Girl and the whole couple, also sets the Compatibility of the couple

hp_generous(GFT, c)

provides gifting logic for Generous type Boys and sets the Happiness of the committed Boy and Girl and the whole couple, also sets the Compatibility of the couple

hp_geek(GFT, c)

provides gifting logic for Geek type Boys and sets the Happiness of the committed Boy and Girl and the whole couple, also sets the Compatibility of the couple

print_sc(C, k)

prints the k least happy Couples

newallocate(B, G, C, k)

allocates new boys to the girls who broke up

3.2 Variables

Name	Description
__package__	Value: None

4 Module q4_gifts

4.1 Variables

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

4.2 Class Gift

gift class for all gifts

4.2.1 Methods

<code>__init__</code> (<i>self</i> , <i>name</i> , <i>price</i> , <i>value</i> , <i>type</i>)
constructor

5 Module q4_girls

5.1 Variables

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

5.2 Class Girl

girl class for all girls

5.2.1 Methods

<code>__init__</code> (<i>self</i> , <i>name</i> , <i>atr</i> , <i>mbudget</i> , <i>intelli</i> , <i>type</i>)
constructor

<code>is_elligible</code> (<i>self</i> , <i>gfbudget</i>)
checks the elligibility of a given Boy, for the current instance of Girl class

6 Module `q4_utility`

6.1 Functions

utility()
creates the input csv files

create (<i>file</i> , <i>list</i>)
writes to csv files

6.2 Variables

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

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