Question9

API Documentation

April 10, 2017

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Class choosy Module choosy_girl

1 Module choosy_girl

1.1 Variables

Name	Description
package	Value: None

1.2 Class choosy

```
object — q3_girl.girl — choosy_girl.choosy
```

1.2.1 Methods

```
__init__(self, name=None, attractiveness=None, intelligence=None, budget=None)

x.__init__(...) initializes x; see help(type(x)) for signature

Overrides: object.__init__ extit(inherited documentation)
```

```
cal_happiness(self, gifts_array)
Overrides: q3_girl.girl.cal_happiness
```

Inherited from object

```
__delattr__(), __format__(), __getattribute__(), __hash__(), __new__(), __reduce__(), __reduce_ex__(), __repr__(), __setattr__(), __sizeof__(), __str__(), __subclasshook__()
```

1.2.2 Properties

Name	Description
Inherited from object	
_class	

1.2.3 Instance Variables

Name			De	scription		
typee	this	fucnction	will	calculate	happpiness	for
	choc	sy girl obje	ect			
Inherited from q3_qirl.qirl (S	Section	14.2)				

continued on next page

Class choosy Module choosy_girl

Name	Description
happiness	

Class Choosy Module chossy_girl

2 Module chossy_girl

2.1 Variables

Name	Description
package	Value: None

2.2 Class Choosy

```
object —
q3_girl.girl —
chossy_girl.Choosy
```

2.2.1 Methods

```
__init__(self, name=None, attractiveness=None, intelligence=None, budget=None)
x.__init__(...) initializes x; see help(type(x)) for signature
Overrides: object.__init__ extit(inherited documentation)
```

```
cal_happiness(self, gifts_array)
Overrides: q3_girl.girl.cal_happiness
```

Inherited from object

```
__delattr__(), __format__(), __getattribute__(), __hash__(), __new__(), __reduce__(), __reduce_ex__(), __repr__(), __setattr__(), __sizeof__(), __str__(), __subclasshook__()
```

2.2.2 Properties

Name	Description
Inherited from object	
_class	

2.2.3 Instance Variables

Class Choosy Module chossy_girl

Name	Description
Inherited from q3_girl.girl (S	ection 14.2)
happiness	

3 Module couple_maker

3.1 Variables

Name	Description
package	Value: None

3.2 Class couple

object couple_maker.couple

3.2.1 Methods

```
__init__(self, boy_b, girl_g)
x.__init__(...) initializes x; see help(type(x)) for signature
Overrides: object.__init__ extit(inherited documentation)
```

Inherited from object

```
__delattr__(), __format__(), __getattribute__(), __hash__(), __new__(), __reduce__(), __reduce_ex__(), __repr__(), __setattr__(), __sizeof__(), __str__(), __subclasshook__()
```

3.2.2 Properties

Name	Description
Inherited from object	
class	

4 Module desperate_girl

4.1 Variables

Name	Description
package	Value: None

4.2 Class desperate

```
object — q3_girl.girl — desperate_girl.desperate
```

4.2.1 Methods

```
__init__(self, name=None, attractiveness=None, intelligence=None, budget=None)
x.__init__(...) initializes x; see help(type(x)) for signature
Overrides: object.__init__ extit(inherited documentation)
```

```
cal_happiness(self, gifts_array)
Overrides: q3_girl.girl.cal_happiness
```

Inherited from object

```
__delattr__(), __format__(), __getattribute__(), __hash__(), __new__(), __reduce__(), __reduce_ex__(), __repr__(), __setattr__(), __sizeof__(), __str__(), __subclasshook__()
```

4.2.2 Properties

Name	Description
Inherited from object	
_class	

4.2.3 Instance Variables

Name	Description
typee	this function will calculate happiness for desper-
	ate girl object
Inherited from q3_girl.girl (Section 14.2)	
happiness	

5 Module essential_gift

5.1 Variables

Name	Description
package	Value: None

5.2 Class essential

```
object —
q3_gift.gift —
essential_gift.essential
```

5.2.1 Methods

```
__init__(self, cost=None, value=None, gift_name=None)

x.__init__(...) initializes x; see help(type(x)) for signature

Overrides: object.__init__ extit(inherited documentation)
```

Inherited from object

5.2.2 Properties

Name	Description
Inherited from object	
class	

Name	Description
Inherited from q3_gift.gift (S	ection 13.2)
$_$ abstractmethods $_$	

Class geek Module geek_boy

6 Module geek_boy

6.1 Variables

Name	Description
package	Value: None

6.2 Class geek

```
object — q3_boy.boy — geek_boy.geek
```

6.2.1 Methods

```
__init__(self, name=None, attractiveness=None, intelligence=None, budget=None)
x.__init__(...) initializes x; see help(type(x)) for signature
Overrides: object.__init__ extit(inherited documentation)
```

```
cal_happiness(self, gifts_array, happiness_girl, intelligence_girl)

Overrides: q3_boy.boy.cal_happiness
```

$Inherited\ from\ object$

```
__delattr__(), __format__(), __getattribute__(), __hash__(), __new__(), __reduce__(), __reduce_ex__(), __repr__(), __setattr__(), __sizeof__(), __str__(), __subclasshook__()
```

6.2.2 Properties

Name	Description
Inherited from object	
class	

Class geek_boy

Name	Description
abstractmethods	Value: frozenset([])

6.2.4 Instance Variables

Name	Description
typee	this function is used to calculate happiness of
	geek boy type object
Inherited from q3_boy.boy (Section 12.2)	
happiness	

7 Module generous_boy

7.1 Variables

Name	Description
package	Value: None

7.2 Class generous

```
object — q3_boy.boy — generous_boy.generous
```

7.2.1 Methods

```
__init__(self, name=None, attractiveness=None, intelligence=None, budget=None)

x.__init__(...) initializes x; see help(type(x)) for signature

Overrides: object.__init__ extit(inherited documentation)
```

```
cal_happiness(self, gifts_array, happiness_girl, intellligence_girl)

Overrides: q3_boy.boy.cal_happiness
```

Inherited from object

```
__delattr__(), __format__(), __getattribute__(), __hash__(), __new__(), __reduce__(), __reduce_ex__(), __repr__(), __setattr__(), __sizeof__(), __str__(), __subclasshook__()
```

7.2.2 Properties

Name	Description
Inherited from object	
_class	

Name	Description
abstractmethods	Value: frozenset([])

7.2.4 Instance Variables

Name	Description
typee	this function is used to calculate happiness for
	generous object type
Inherited from q3_boy.boy (S	Tection 12.2)
happiness	

Class luxury Module luxury_gift

8 Module luxury_gift

8.1 Variables

Name	Description
package	Value: None

8.2 Class luxury

```
object —
q3_gift.gift —
luxury_gift.luxury
```

8.2.1 Methods

```
__init__(self, luxury_gift_rating=None, cost=None, value=None,
gift_name=None)
x.__init__(...) initializes x; see help(type(x)) for signature
Overrides: object.__init__ extit(inherited documentation)
```

Inherited from object

8.2.2 Properties

Name	Description
Inherited from object	
class	

Name	Description
Inherited from q3_gift.gift (Section 13.2)	
_abstractmethods	

Class miser Module miser_boy

9 Module miser_boy

9.1 Variables

Name	Description
package	Value: None

9.2 Class miser

```
object —
q3_boy.boy —
miser_boy.miser
```

9.2.1 Methods

```
__init__(self, name=None, attractiveness=None, intelligence=None, budget=None)
x.__init__(...) initializes x; see help(type(x)) for signature
Overrides: object.__init__ extit(inherited documentation)
```

```
cal_happiness(gifts_array, happiness_girl, intelligence_girl)
Overrides: q3_boy.boy.cal_happiness
```

Inherited from object

```
__delattr__(), __format__(), __getattribute__(), __hash__(), __new__(), __reduce__(), __reduce_ex__(), __repr__(), __setattr__(), __sizeof__(), __str__(), __subclasshook__()
```

9.2.2 Properties

Name	Description
Inherited from object	
_class	

Class miser

Module miser_boy

Name	Description
abstractmethods	Value: frozenset([])

9.2.4 Instance Variables

Name	Description
typee	this function will calculate happiness for miser
	boy object
Inherited from q3_boy.boy (Section 12.2)	
happiness	

Class normal Module normal_girl

10 Module normal_girl

10.1 Variables

Name	Description
package	Value: None

10.2 Class normal

```
object —
q3_girl.girl —
normal_girl.normal
```

10.2.1 Methods

```
__init__(self, name=None, attractiveness=None, intelligence=None, budget=None)
x.__init__(...) initializes x; see help(type(x)) for signature
Overrides: object.__init__ extit(inherited documentation)
```

```
cal_happiness(self, gifts_array)
Overrides: q3_girl.girl.cal_happiness
```

$Inherited\ from\ object$

```
__delattr__(), __format__(), __getattribute__(), __hash__(), __new__(), __reduce__(), __reduce_ex__(), __repr__(), __setattr__(), __sizeof__(), __str__(), __subclasshook__()
```

10.2.2 Properties

Name	Description
Inherited from object	
_class	

10.2.3 Instance Variables

Class normal Module normal_girl

Name	Description
Inherited from q3_girl.girl (S	Section 14.2)
happiness	

11 Module q3

11.1 Functions

```
\mathbf{comapare\_gifts}(\mathit{gift\_object1},\,\mathit{gift\_object2})
```

```
compare_fitting(couple1, couple2)
```

 $compare_happiness(couple1, couple2)$

11.2 Variables

Name	Description
girl_array	Value: []
boy_array	Value: []
couple_array	Value: []
gift_array	Value: []
row_count_boys	Value: 12
boyReader	Value: csv.reader(boysfile, delimiter= ',')
boyslist	Value: [['ram ', ' 5 ', ' 9 ', ' geek ', ' 100'], ['shyam ', ' 7
row_count_girls	Value: 6
girlReader	Value: csv.reader(girlsfile, delimiter= ',')
girlslist	Value: [['radha ', ' 5 ', ' 6 ', '
	choosy ', ' 80'], ['tina ', '
row_count_gifts	Value: 20
giftReader	Value: csv.reader(giftsfile)
giftslist	Value: [['Luxury ', '8 ', '9'],
	['Utility', ' 5', ' 5'], ['Essen
k	Value: 4
file	Value: open('ans_file_Happiness.txt',
	'w')
ansfilewriter	Value: csv.writer(ansfile)
package	Value: None
ansfile	Value: <closed file<="" td=""></closed>
	'ans_file_Happiness.txt', mode 'a' at
	0x7f7f
boysfile	Value: <closed 'boys.csv',="" file="" mode<="" td=""></closed>
	'r' at 0x7f7f0dad71e0>

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Variables Module q3

Name	Description
giftsfile	Value: <closed 'gifts.txt',="" file="" mode<="" th=""></closed>
	'r' at 0x7f7f0dad7420>
girlsfile	Value: <closed 'girls.txt',="" file="" mode<="" th=""></closed>
	'r' at 0x7f7f0dad7150>
hap_boy	Value: 69
hap_girl	Value: 69
i	Value: 3
j	Value: 19
main_cost	Value: 178
row	Value: ['Luxury ', ' 6 ', ' 7']
X	Value: 118
У	Value: 129

Class boy Module q3_boy

12 Module q3_boy

12.1 Variables

Name	Description
package	Value: None

12.2 Class boy

Known Subclasses: geek_boy.geek, generous_boy.generous, miser_boy.miser

12.2.1 Methods

```
__init__(self, name=None, attractiveness=None, intelligence=None, budget=None)

x.__init__(...) initializes x; see help(type(x)) for signature

Overrides: object.__init__ extit(inherited documentation)
```

cal_happiness(self, gifts_Array, happiness_of_girl, intelligence_girl)

Inherited from object

12.2.2 Properties

Name	Description
Inherited from object	
class	

Name	Description
$_$ abstractmethods $_$	Value: frozenset(['cal_happiness'])

Class boy Module q3_boy

12.2.4 Instance Variables

Name	Description
happiness	this abstract method s used to calculate happi-
	ness, which will be made concrete in the calling
	class

Class gift Module q3_gift

13 Module q3_gift

13.1 Variables

Name	Description
package	Value: None

13.2 Class gift

Known Subclasses: essential_gift.essential, luxury_gift.luxury, utility_gift.utility

13.2.1 Methods

```
__init__(self, cost=None, value=None, gift_name=None)
x.__init__(...) initializes x; see help(type(x)) for signature
Overrides: object.__init__ extit(inherited documentation)
```

Inherited from object

13.2.2 Properties

Name	Description
Inherited from object	
class	

Name	Description
_abstractmethods	Value: frozenset([])

Class girl Module q3_girl

14 Module q3_girl

14.1 Variables

Name	Description
package	Value: None

14.2 Class girl

Known Subclasses: choosy_girl.choosy, chossy_girl.Choosy, desperate_girl.desperate, normal_girl.normal

14.2.1 Methods

```
__init__(self, name=None, attractiveness=None, intelligence=None, budget=None)

x.__init__(...) initializes x; see help(type(x)) for signature

Overrides: object.__init__ extit(inherited documentation)
```

Inherited from object

14.2.2 Properties

Name	Description
Inherited from object	
class	

14.2.3 Instance Variables

Class girl Module q3_girl

Name	Description
happiness	this abstract function is used to calculate happi-
	ness, will be made concrete in the calling class

15 Module q4

15.1 Functions

```
comapare_gifts(gift_object1, gift_object2)
compare_fitting(couple1, couple2)
compare_happiness(couple1, couple2)
```

15.2 Variables

Name	Description
girl_array	Value: []
boy_array	Value: []
couple_array	Value: []
gift_array	Value: []
row_count_boys	Value: 12
boyReader	Value: csv.reader(boysfile, delimiter=
	',')
boyslist	Value: [['ram ', ' 5 ', ' 9 ', ' geek ',
	' 100'], ['shyam ', ' 7
row_count_girls	Value: 6
girlReader	Value: csv.reader(girlsfile, delimiter=
	',')
girlslist	Value: [['radha ', ' 5 ', ' 6 ', '
	choosy ', '80'], ['tina ', '
row_count_gifts	Value: 20
giftReader	Value: csv.reader(giftsfile)
giftslist	Value: [['Luxury ', '8 ', '9'],
	['Utility', ' 5', ' 5'], ['Essen
k	Value: 1
d	Value: {'krishna ': 'Laila '}
file	Value:
	open('ans_file_Happiness_after_breakup.txt',
	'w')
ansfilewriter	Value: csv.writer(ansfile)
package	Value: None
ansfile	Value: <closed file<="" td=""></closed>
	'ans_file_Happiness_breakup.txt', mode
	'a' a

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Variables Module q4

Name	Description
boysfile	Value: <closed 'boys.csv',="" file="" mode<="" th=""></closed>
	'r' at 0x7f7f0dad7540>
giftsfile	Value: <closed 'gifts.txt',="" file="" mode<="" th=""></closed>
	'r' at 0x7f7f0dad76f0>
girlsfile	Value: <closed 'girls.txt',="" file="" mode<="" th=""></closed>
	'r' at 0x7f7f0dad75d0>
hap_boy	Value: 69
hap_girl	Value: 69
i	Value: 0
j	Value: 5
main_cost	Value: 178
row	Value: ['Luxury ', ' 6 ', ' 7']
X	Value: 118
У	Value: 129

16 Module q5

16.1 Functions

compare_happiness(couple1, couple2)

16.2 Variables

Name	Description
girl_array	Value: []
boy_array	Value: []
couple_array	Value: []
gift_array	Value: []
row_count_boys	Value: 12
boyReader	Value: csv.reader(boysfile, delimiter=
	',')
boyslist	Value: [['ram ', '5 ', '9 ', 'geek ',
	' 100'], ['shyam ', ' 7
row_count_girls	Value: 6
girlReader	Value: csv.reader(girlsfile, delimiter=
	',')
girlslist	Value: [['radha ', ' 5 ', ' 6 ', '
	choosy ', ' 80'], ['tina ', '
row_count_gifts	Value: 20
giftReader	Value: csv.reader(giftsfile)
giftslist	Value: [['Luxury ', '8 ', '9'],
	['Utility', ' 5', ' 5'], ['Essen
cnt	Value: 6
k	Value: 4
file	Value: open('ans_file_Happiness.txt',
	'w')
ansfilewriter	Value: csv.writer(ansfile)
package	Value: None

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Variables Module q5

Name	Description
ansfile	Value: <closed file<="" td=""></closed>
	'ans_file_Happiness.txt', mode 'a' at
	0x7f7f
boysfile	Value: <closed 'boys.csv',="" file="" mode<="" th=""></closed>
	'r' at 0x7f7f0dad7810>
flag	Value: 0
giftsfile	Value: <closed 'gifts.txt',="" file="" mode<="" th=""></closed>
	'r' at 0x7f7f0dad7930>
girlsfile	Value: <closed 'girls.txt',="" file="" mode<="" th=""></closed>
	'r' at 0x7f7f0dad79c0>
hap_boy	Value: 69
hap_girl	Value: 69
i	Value: 3
j	Value: 19
main_cost	Value: 178
row	Value: ['Luxury ', ' 6 ', ' 7']
X	Value: 118
У	Value: 129

17 Module q6

17.1 Functions

```
compare_fitting(couple1, couple2)
compare_happiness(couple1, couple2)
comapare_gifts(gift_object1, gift_object2)
```

17.2 Variables

Name	Description
girl_array	Value: []
boy_array	Value: []
couple_array	Value: []
gift_array	Value: []
row_count_boys	Value: 12
boyReader	Value: csv.reader(boysfile, delimiter= ',')
boyslist	Value: [['ram ', ' 5 ', ' 9 ', ' geek ', ' 100'], ['shyam ', ' 7
row_count_girls	Value: 6
girlReader	<pre>Value: csv.reader(girlsfile, delimiter= ',')</pre>
girlslist	Value: [['radha ', ' 5 ', ' 6 ', ' choosy ', ' 80'], ['tina ', '
row_count_gifts	Value: 20
giftReader	Value: csv.reader(giftsfile)
giftslist	Value: [['Luxury ', '8 ', '9'],
	['Utility', '5', '5'], ['Essen
d	Value: {'krishna ': 'Laila ', 'ram ': 'tina '}
t	Value: 300
i	Value: 2
k	Value: 3
file	Value:
	open('ans_file_Happiness_after_breakup.txt', ', ', ')
ansfilewriter	Value: csv.writer(ansfile)
package	Value: None

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Variables Module q6

Name	Description
ansfile	Value: <closed file<="" th=""></closed>
	'ans_file_Happiness_breakup.txt', mode
	'a' a
boysfile	Value: <closed 'boys.csv',="" file="" mode<="" th=""></closed>
	'r' at 0x7f7f0dad7b70>
giftsfile	Value: <closed 'gifts.txt',="" file="" mode<="" th=""></closed>
	'r' at 0x7f7f0dad7d20>
girlsfile	Value: <closed 'girls.txt',="" file="" mode<="" th=""></closed>
	'r' at 0x7f7f0dad7c90>
hap_boy	Value: 69
hap_girl	Value: 69
j	Value: 5
k1	Value: 3
main_cost	Value: 178
row	Value: ['Luxury ', ' 6 ', ' 7']
X	Value: 118
У	Value: 129
Z	Value: 299

Variables Module q7

18 Module q7

18.1 Variables

Name	Description
girl_array	Value: []
boy_array	Value: []
couple_array	Value: []
gift_array	Value: []
row_count_boys	Value: 12
boyReader	Value: csv.reader(boysfile, delimiter= ',')
boyslist	Value: [['ram ', ' 5 ', ' 9 ', ' geek ', ' 100'], ['shyam ', ' 7
row_count_girls	Value: 6
girlReader	Value: csv.reader(girlsfile, delimiter= ',')
girlslist	Value: [['radha ', ' 5 ', ' 6 ', '
	choosy ', ' 80'], ['tina ', '
row_count_gifts	Value: 0
ansfilewriter	Value: csv.writer(ansfile)
k	Value: 1
store	Value: sorted()
couple_array_store	Value: []
package	Value: None
ansfile	Value: <closed file<="" td=""></closed>
	'ans_file_couples.txt', mode 'w' at
	0x7f7f0d
boysfile	Value: <closed 'boys.csv',="" file="" mode<="" td=""></closed>
	'r' at 0x7f7f0dad7db0>
girlsfile	Value: <closed 'girls.txt',="" file="" mode<="" td=""></closed>
	'r' at 0x7f7f0dad7f60>
i	Value: 3
j	Value: 5
row	Value: ['Juliet ', ' 7 ', ' 8 ', '
	normal ', ' 176']

Class algorithm Module q7-algo

19 Module q7_algo

19.1 Variables

Name	Description
package	Value: None

19.2 Class algorithm

```
object — q7_algo.algorithm
```

Known Subclasses: q7_hash_table.hash_table, q7_sorted_array.sorted

19.2.1 Methods

```
__init__(self)
x.__init__(...) initializes x; see help(type(x)) for signature
Overrides: object.__init__ extit(inherited documentation)
```

```
\mathbf{algo\_applier}(self)
```

Inherited from object

19.2.2 Properties

Name	Description
Inherited from object	
_class	

Name	Description
abstractmethods	Value: frozenset(['algo_applier'])

Class algorithm Module q7_algo

19.2.4 Instance Variables

Name	Description
array_of_couple	this is abstract method, ehich will be made con-
	mcrete in child method that applies it

20 Module q7_hash_table

20.1 Variables

Name	Description
package	Value: None

20.2 Class hash_table

```
object —
q7_algo.algorithm —
q7_hash_table.hash_table
```

20.2.1 Methods

```
__init__(self)
x.__init__(...) initializes x; see help(type(x)) for signature
Overrides: object.__init__ extit(inherited documentation)
```

```
      algo_applier(self, array_of_couples)

      Overrides: q7_algo.algorithm.algo_applier
```

Inherited from object

20.2.2 Properties

Name	Description
Inherited from object	
class	

20.2.3 Class Variables

continued on next page

Name	Description
Name	Description
$_$ abstractmethods $_$	Value: frozenset([])

20.2.4 Instance Variables

Name	Description
Inherited from q7_algo.algorithm (Section 19.2)	
array_of_couple	

21 Module q7_sorted_array

21.1 Variables

Name	Description
package	Value: None

21.2 Class sorted

```
object —
q7_algo.algorithm —
q7_sorted_array.sorted
```

21.2.1 Methods

```
__init__(self)
x.__init__(...) initializes x; see help(type(x)) for signature
Overrides: object.__init__ extit(inherited documentation)
```

```
\mathbf{cmp}(couple\_1, couple\_2)
```

```
algo_applier(self, array_of_couples)
Overrides: q7_algo.algorithm.algo_applier
```

Inherited from object

```
__delattr__(), __format__(), __getattribute__(), __hash__(), __new__(), __reduce__(), __reduce_ex__(), __repr__(), __setattr__(), __sizeof__(), __str__(), __subclasshook__()
```

21.2.2 Properties

Name	Description
Inherited from object	
_class	

21.2.3 Class Variables

Name	Description
_abstractmethods	Value: frozenset([])

21.2.4 Instance Variables

Name	Description
Inherited from q7_algo.algorithm (Section 19.2)	
array_of_couple	

$22 \quad \text{Module q9}$

22.1 Functions

```
\mathbf{comapare\_gifts}(gift\_object1,\ gift\_object2)
```

```
\boxed{\mathbf{compare\_fitting}(\mathit{couple1},\,\mathit{couple2})}
```

 $compare_happiness(couple1, couple2)$

22.2 Variables

Name	Description
girl_array	Value: []
boy_array	Value: []
couple_array	Value: []
gift_array	Value: []
row_count_boys	Value: 12
boyReader	Value: csv.reader(boysfile, delimiter= ',')
boyslist	Value: [['ram ', ' 5 ', ' 9 ', ' geek ', ' 100'], ['shyam ', ' 7
row_count_girls	Value: 6
girlReader	Value: csv.reader(girlsfile, delimiter= ',')
girlslist	Value: [['radha ', ' 5 ', ' 6 ', '
	choosy ', ' 80'], ['tina ', '
k	Value: 4
row_count_gifts	Value: 20
giftReader	Value: csv.reader(giftsfile)
giftslist	Value: [['Luxury ', '8 ', '9'],
	['Utility', ' 5', ' 5'], ['Essen
file	Value: open('ans_file_Happiness.txt',
	'w')
ansfilewriter	Value: csv.writer(ansfile)
package	Value: None
ansfile	Value: <closed file<="" td=""></closed>
	'ans_file_Happiness.txt', mode 'a' at
	0x7f7f
best_k_boys	Value: <q9_template_best_k.template< td=""></q9_template_best_k.template<>
	object at 0x7f7f0da1e690>

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Variables Module q9

Name	Description
boysfile	Value: <closed 'boys.csv',="" file="" mode<="" th=""></closed>
	'r' at 0x7f7f0d7bc150>
gift_store	Value: <q9_template_best_k.template< th=""></q9_template_best_k.template<>
	object at 0x7f7f0da1ecd0>
giftsfile	Value: <closed 'gifts.txt',="" file="" mode<="" th=""></closed>
	'r' at 0x7f7f0d7bc300>
girlsfile	Value: <closed 'girls.txt',="" file="" mode<="" th=""></closed>
	'r' at 0x7f7f0d7bc1e0>
hap_boy	Value: 69
hap_girl	Value: 69
i	Value: 3
j	Value: 19
main_cost	Value: 178
row	Value: ['Luxury ', ' 6 ', ' 7']
X	Value: 118
У	Value: 129

$23 \quad Module \ q9_template_best_k$

23.1 Variables

Name	Description
package	Value: None

23.2 Class template

```
object — q9_template_best_k.template
```

23.2.1 Methods

```
__init__(self)
x.__init__(...) initializes x; see help(type(x)) for signature
Overrides: object.__init__ extit(inherited documentation)
```

 $\mathbf{cmp_boy}(boy_1,\ boy_2)$

 $\mathbf{cmp_girl}(girl_1, girl_2)$

 $\mathbf{cmp_gift}(gift_object1, gift_object2)$

 $\mathbf{best_k}(self, k, b_g_gi, array)$

Inherited from object

```
__delattr__(), __format__(), __getattribute__(), __hash__(), __new__(), __reduce__(), __reduce_ex__(), __repr__(), __setattr__(), __sizeof__(), __str__(), __subclasshook__()
```

23.2.2 Properties

Name	Description
Inherited from object	
_class	

23.2.3 Instance Variables

Name	Description
kj	this function compares boy according to their
	values of attractiveness

${\bf 24}\quad Script\ script-ans_file_Compatibility_txt$

 ${\bf 25} \quad Script \; script-ans_file_Happiness_after_breakup_txt$

 ${\bf 26}\quad {\bf Script\ script\hbox{-}ans_file_Happiness_breakup_txt}$

 ${\bf 27} \quad {\bf Script\ script\mbox{-}ans_file_Happiness_txt}$

 ${\bf 28}\quad Script_script_ans_file_couples_q7_txt$

 ${\bf 29}\quad {\bf Script\ script\ -ans_file_couples_txt}$

$30 \quad Script \; script-boys_csv$

 $31 \quad Script \ script-gifting_log_q9_txt$

${\bf 32}\quad Script\ script\hbox{-}gifts_txt$

${\bf 33}\quad {\bf Script\ script\hbox{-}girls_txt}$

$34 \quad Script \ script \hbox{-log_txt}$

Class utility Module utility_gift

35 Module utility_gift

35.1 Variables

Name	Description
package	Value: None

35.2 Class utility

```
object \( \bigcap \) \( q3_\text{gift.gift} \( \bigcap \) \( \text{utility_gift.utility} \)
```

35.2.1 Methods

```
__init__(self, utility_value=None, utility_class=None, cost=None, value=None, gift_name=None)
x.__init__(...) initializes x; see help(type(x)) for signature
Overrides: object.__init__ extit(inherited documentation)
```

Inherited from object

35.2.2 Properties

Name	Description
Inherited from object	
_class	

35.2.3 Class Variables

Name	Description
Inherited from q3_gift.gift (Section 13.2)	
abstractmethods	

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