



0.1 Python test

```

1  # -*- coding: utf-8 -*-
2  """
3  Created on Sat Mar 7 15:09:03 2020
4

```

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5  @author: anne smal
6  """
7  import random
8  import datetime
9
10 class Human :
11
12     def __init__ (self, name, bd=None) :
13         self._name = name
14         if bd :
15             self._birthday = bd
16         else :
17             self._birthday = datetime.date.today()
18         self._gender = random.choice('MF')
19
20     @property
21     def name(self):
22         return self._name
23     @name.setter
24     def name(self, new_name):
25         self._name = new_name
26
27     """
28     @property
29     def age(self):
30         return self._age
31     @age.setter
32     def age(self, new_age):
33         self._age = new_age
34     """
35
36     @property
37     def gender(self):
38         return self._gender
39     @gender.setter
40     def gender(self, new_gender):
41         self._gender = new_gender
42
43     @property
44     def birthday(self):
45         return self._birthday
46
47     def say(self, message) :
48         print(self._name, ":", message)
49
50
51
52
53     @property
54     def age(self):
55         today = datetime.datetime.now()
56         age = today.year - self._birthday.year
57
58         if (today.month<self._birthday.month) or (today.month ==
59             self._birthday.month and today.day<self._birthday.day):
60             age -= 1

```

```
61         return age
62
63
64 if __name__=="__main__" :
65     bd = datetime.date(2000, 2, 21)
66     bob = Human("Bob",bd)
67     bob.say("I am " + str(bob.age) + " years old")
```