

```

1  from random import randint
2
3  class Dice:
4      def __init__(self, defaultValue): # self - represents the object to be created
5          """
6          constuctor that execute when a Dice object is created
7          the default value for the dice is 4
8          """
9          self.__value = defaultValue # __ (dunder) ==> PRIVATE attribute
10         # self.value = 4 # defining attribute this way make it public attribbite
11
12     def roll(self):
13         self.__value = randint(1,6)
14
15     def getValue(self): # accessor
16         return self.__value
17
18                                     # no mutator for Dice object as it is not ethical to do so
19     def __str__(self):
20         return "Value of the dice is " + str(self.__value)
21
22 if __name__ == '__main__':
23     #creation, d1 d2 are unique names for the Dice objects
24     d1 = Dice(1)
25     d2 = Dice(2)
26
27     print(d1.__str__())
28     print(d2)
29     print(str(d2))
30
31     d2.roll()
32     d1.roll()
33     print("d1 is", d1.getValue())
34     print("d2 is", d2.getValue())

```

Dice

- value: int

+ __init__()

+ roll()

+ getValue(): int

+ __str__(): str

Different ways to call the str method of Dice object

UML diagrams for Deck and Card class

