

```
In [10]: ▶ 1 # Example 01
2 class Rocket:
3     def __init__(self, name, distance):
4         self.name = name
5         self.distance = distance
6     def launch(self):
7         return "%s has reached %s" % (self.name, self.distance)
8
9 class MarsRover(Rocket):
10    def __init__(self, name, distance, maker):
11        Rocket.__init__(self, name, distance)
12        self.maker = maker
13    def get_maker(self):
14        return "%s Launched by %s" % (self.name, self.maker)
15
16 if __name__ == "__main__":
17     x = Rocket("simple rocket", "till stratosphere")
18     y = MarsRover("mars_rover", "till Mars", "ISRO")
19     print(x.launch())
20     print(y.launch())
21     print(y.get_maker())
```

executed in 24ms, finished 16:44:45 2020-07-20

simple rocket has reached till stratosphere
mars_rover has reached till Mars
mars_rover Launched by ISRO

```
In [11]: ▶ 1 # Example 02
2 class MarsRoverComp():
3     def __init__(self, name, distance, maker):
4         self.rocket = Rocket(name, distance)
5         self.maker = maker
6     def get_maker(self):
7         return "%s Launched by %s" % (self.rocket.name, self.maker)
8
9 if __name__ == "__main__":
10     z = MarsRoverComp("mars_rover2", "till Mars", "ISRO")
11     print(z.launch())
12     print(z.get_maker())
```

executed in 16ms, finished 16:45:53 2020-07-20

mars_rover2 has reached till Mars
mars_rover2 Launched by ISRO

In [3]:

```
1 # Example 03
2 class Salary:
3     def __init__(self, pay):
4         self.pay = pay
5     def get_total(self):
6         return (self.pay*12)
7
8 class Employee:
9     def __init__(self, pay, bonus):
10        self.pay = pay
11        self.bonus = bonus
12        self.obj_salary = Salary(self.pay)
13    def annual_salary(self):
14        return "Total: " + str(self.obj_salary.get_total() + self.bonus)
15
16 obj_emp = Employee(200, 800)
17 print(obj_emp.annual_salary())
```

executed in 24ms, finished 16:31:47 2020-07-20

Total: 3200

In [13]:

```
1 # Task 01
2 class Birthday:
3     def __init__(self, day, month, year):
4         self.day = day
5         self.month = month
6         self.year = year
7     def getBirthday(self):
8         return f'{self.day}-{self.month}-{self.year}'
9
10 class People:
11     def __init__(self, name, id, day, month, year):
12         self.name = name
13         self.id = id
14         self.birthday = Birthday(day, month, year)
15     def printDetails(self):
16         return f'Name: {self.name}\nID: {self.id}\nBirthday: {self.birthday}'
17
18 p1 = People('Hamza', 80, '20', 'Dec', '2001')
19 print(p1.printDetails())
```

executed in 24ms, finished 16:46:57 2020-07-20

Name: Hamza

ID: 80

Birthday: 20-Dec-2001