Exercise No: 13

Date: 23/11/2020

**Aim:**

To create a python program for Apparel shop with silk and cotton materials to calculate price using Class and Inheritance.

**Program:**

class Apparel:

counter=100

def \_\_init\_\_(self,price,item\_type):

Apparel.counter+=1

self.\_\_itemid=item\_type[0]+str(Apparel.counter)

self.\_\_price=price

self.\_\_item\_type=item\_type

def calculate\_price(self):

self.\_\_price+=self.\_\_price\*0.05

def get\_item\_id(self):

return self.\_\_item\_id

def get\_price(self):

return self.\_\_price

def get\_item\_type(self):

return self.\_\_item\_type

def set\_price(self,price):

self.\_\_price=price

return self.\_\_price

class Cotton(Apparel):

def \_\_init\_\_(self,price,discount):

super().\_\_init\_\_(price,'Cotton')

self.\_\_discount=discount

def calculate\_price(self):

super().calculate\_price()

price=self.get\_price()

price-=price\*(self.\_\_discount/100)

price+=price\*0.05

self.set\_price(price)

return price

def get\_discount(self):

return self.\_\_discount

class Silk(Apparel):

def \_\_init\_\_(self,price):

super().\_\_init\_\_(price,'Silk')

self.\_\_points=None

def calculate\_price(self):

super().calculate\_price()

if(self.get\_price()>10000):

self.\_\_points=10

else:

self.\_\_points=3

return self.set\_price(self.get\_price()+(self.get\_price()\*0.1))

def get\_points(self):

return self.\_\_points

silk1=int(input())

cotton1=int(input())

disc=int(input())

obj1=Silk(silk1)

print(obj1.calculate\_price())

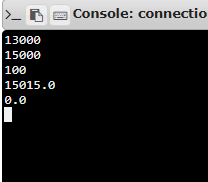
obj2=Cotton(cotton1,disc)

print(obj2.calculate\_price())

**Link:**

<http://103.53.53.18/mod/vpl/forms/submissionview.php?id=328&userid=1657>

**Output:**



**Result:**

Thus, the program for calculating price for two different materials which are inherited from single class Apparel is successfully executed and output is obtained.