#1.

class Login:

def \_\_init\_\_(self,name,password):

self.\_\_name=name

self.\_\_password=password

def set\_pass(self,password):

self.\_\_password=password

if len(password)<=8:

return "password must contain 8 characters"

else:

print("it is not valid")

for i in password:

if password not in (1,2,3,4,5,6,7,8,9,0):

return "password must contain atleast 1 numbers"

elif password not in ("~","!","@","#","$","%","^","&","\*"):

return "password must contain atleast 1 special charaters"

name=input("enter the name:")

pas=input("enter the password:")

l=Login(name,pas)

p=input()

l.set\_pass(pas)

print(f"name:{name}\npassword:{pas}")

#3.

class Student:

def \_init\_(self,name,age,marks):

self.set\_name(name)

self.set\_age(age)

self.set\_marks(marks)

def set\_name(self,name):

self.\_\_name = name

def get\_name(self):

return self.\_\_name

def set\_age(self,age):

if not 5<=age<=100:

raise ValueError("Age must between 5 and 100")

self.\_\_age=age

def get\_age(self):

return self.\_\_age

def set\_marks(self,marks):

if not 0<=marks<=100:

raise ValueError("Marks must between 0 and 100")

self.\_\_marks=marks

def get\_marks(self):

return self.\_\_marks

student=Student("Ray", 18, 80)

print(student.get\_name())

print(student.get\_age())

print(student.get\_mark())

#2.

class Product:

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

self.\_\_name = name

self.set\_price(price)

self.set\_stock(stock)

def set\_price(self, price):

if price <= 0:

print("Price must be greater than 0")

else:

self.\_\_price = price

def set\_stock(self, stock):

if not isinstance(stock, int) or stock < 0:

print("Stock must be a non-negative integer")

else:

self.\_\_stock = stock

def get\_stock(self):

return self.\_\_stock

product = Product("phone", 99.9, 300)

print(product.get\_stock())

product.set\_stock(56)

print(product.get\_stock())

product.set\_stock(3.5)

product.set\_stock(-10)