

## Inheritance Page 227 Exercise 4 Question 8

i.

```

C:\Windows\System32\cmd.exe

C:\Users\Junyao\Documents\GitHub\OOP-Lab-2020\Overloading, Overriding\Page 227 Inheritance Q8>java TestClass1
10 in Class A

C:\Users\Junyao\Documents\GitHub\OOP-Lab-2020\Overloading, Overriding\Page 227 Inheritance Q8>

C:\Windows\System32\cmd.exe

C:\Users\Junyao\Documents\GitHub\OOP-Lab-2020\Overloading, Overriding\Page 227 Inheritance Q8>java TestClass2
10 in Class B

C:\Users\Junyao\Documents\GitHub\OOP-Lab-2020\Overloading, Overriding\Page 227 Inheritance Q8>
  
```

Program	Output
TestClass1	10 in Class A
TestClass2	10 in Class B

ii.

Program	Method
TestClass1	Overriding
TestClass2	Overloading

iii.

Overloading	Overriding
Must have at least two methods by same name in same class	Must have at least one method by same name in both Parent and child class
Must have different number of parameters	Must have same number of parameters
If number of parameters are same, then must have different types of parameters	Types of parameters also must be same
Overloading know as compile time polymorphism	Overriding knows as run time polymorphism

i. UML Diagram

