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Student.java x Person.java Emp.java MainClass.java
1 package Shadowing;
2
3 public class Student {
4     String name="Krishna";int age =21;//Global Var
5
6     public void details()
7     {
8         String name = "Ahmed"; int age =18;//Local Var
9
10        System.out.println("Name : "+this.name);
11        System.out.println("Age : "+this.age);
12        System.out.println("Name : "+name);
13        System.out.println("Age : "+age);
14    }
15    public static void main(String[] args) {
```

```
5  
6  
7 public void details()  
8 {  
9     String name = "Ahmed"; int age =18;//Local Var  
10  
11     System.out.println("Name : "+this.name);  
12     System.out.println("Age : "+this.age);  
13     System.out.println("Name : "+name);  
14     System.out.println("Age : "+age);  
15 }  
16 public static void main(String[] args) {  
17     Student s1=new Student();  
18     s1.details();  
19 }
```

```
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Student.java Person.java Emp.java J1 MainDriver.java
3 public class Emp extends Person {
4     int eid=122;
5     String desg="Developer";
6
7     public void data()
8     {
9
10        String name="Abi",desg="Tester";
11        int age=21,eid=125;
12        System.out.println("Name : "+super.name);
13        System.out.println("Age : "+super.age);
14        System.out.println("EmpId: "+this.eid);
15        System.out.println("Emp Desg : "+this.desg);
16    }
```



```
1 package Overloading;
2
3 class A {
4     static void m1(int i)
5     {
6         System.out.println("int i = "+i);
7     }
8     static void m1(double d)
9     {
10        System.out.println("double d = "+d);
11    }
12 }
13
```

```
1 package Shadowing;  
2  
3 public class Person {  
4     String name="Jana";  
5     int age=23;  
6 }  
7
```

Air Hazardous
Now Tuesday

```
1 package Shadowing;
2
3 public class MainDriver1 {
4
5     public static void main(String[] args) {
6         Emp e1=new Emp();
7         e1.data();
8     }
9 }
10
```

```
1 package Overloading;
2
3 class B extends A {
4     void m2(String s)
5     {
6         System.out.println("String s = "+s);
7     }
8     void m2(long l)
9     {
10        System.out.println("long l = "+l);
11    }
12
13    public static void main(String[] args) {
14        B b1=new B();
15        b1.m2("0006756511");
16    }
17 }
```



```

7      }
8  }
9  void m2(long l)
10 {
11     System.out.println("long l = "+l);
12 }
13
14 public static void main(String[] args) {
15     B b1=new B();
16     b1.m2(90867565L);
17     b1.m2("Good");
18     B.m1(52); //class by static way ClassName
19     B.m1(90.09);
20 }

```



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9 void m2(long l)  
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12 }  
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```
7  
8 }  
9 void m2(long l)  
10 {
```

```
11     System.out.println("long l = "+l);  
12 }  
13
```

```
14 public static void main(String[] args) {  
15     B b1=new B();
```

```
16     //call by Reference of  
17     b1.m2(90867565L);
```

```
18     b1.m2("Good");
```

```
19     //call by static way ClassName  
20     B.m1(52);
```

```
21     B.m1(90.09);  
22 }
```

Run-time / Dynamic Polymorphism

Based on the type of instance calling the behavior, during the execution process, the behavior can exhibit different task. This is called as Run-Time polymorphism.

i. Overriding

Here, a parent class and a child class can have methods, with same name, same return type, same arguments and broader access modifier (public in child).

Rule to achieve method overriding :

- Is-A relationship is mandatory.
- It is applicable only for nonstatic methods.
- The signature of the subclass method and superclass method should be the same.

VARIABLE SHADOWING :

If the superclass and subclass have variables with the same name then it is known as variable shadowing.

Which variable is used, depending on what?

In variable shadowing binding is done at compile-time, hence it is a compile-time polymorphism. The Variable used depends on the reference type and does not depend on the type of object created.

NOTE :

- It is applicable for both static and non-static variables.
- It is a compile-time polymorphism.
- Variable usage depends on the type of reference and does not depend on the type of object created.

MIL NADU
10
cores
PET

CHROME PET Spiders spider.
HEAD OFFICE, TAMIL NADU
Those who are **BEST** in all 4
subjects but did not get the
job, Meet
Bharath sir / Harsha sir
in CHROME PET OFFICE.
We want to help **BEST** students

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LAKHS
PLACED TILL DATE

→ Inheritance
→ Typecasting
→ Polymor
↳ Override

