

# Java Concept 5

- **Parent** class reference variable **can store** **child** class reference variable value
- **Child** class reference variable **can not store** **parent** class reference variable value

```
1 //No Error
2 class Parent
3 {...}
6 class Child extends Parent
7 {
8     Child ch = new Child();
9     Parent pa = ch;
10 }
```

```
1 //Error
2 class Parent
3 {...}
6 class Child extends Parent
7 {
8     Parent pa = new Parent();
9     Child ch = pa;
10 }
```

```
1 //Parent class reference variable storing child
2 //class reference variable value // No Error
3 class Parent {
4     public void Print() {
5         System.out.println("Inside Parent Class");
6     }
7 }
8
9 class Child extends Parent {
10     public void Print() {
11         System.out.println("Inside Child Class");
12     }
13 }
14
15 class JavaConcept{
16     public static void CallPrint( Parent o ) {
17         o.Print();
18     }
19     public static void main(String[] args) {
20         Child child_ref_1 = new Child();
21         Parent parent_ref_1 = child_ref_1;
22         parent_ref_1.Print();
23
24         Child child_ref_12 = new Child();
25         CallPrint(child_ref_12);
26     }
27 }
```

run:

Inside Child Class  
Inside Child Class

```
1 //Child class reference variable storing parent
2 //class reference variable value // Error
3 class Parent {
4     public void Print() {
5         System.out.println("Inside Parent Class");
6     }
7 }
8
9 class Child extends Parent {
10     public void Print() {
11         System.out.println("Inside Child Class");
12     }
13 }
14
15 class JavaConcept{
16     public static void CallPrint( Parent o ) {
17         o.Print();
18     }
19     public static void main(String[] args) {
20         Parent parent_ref_2 = new Parent();
21         Child child_ref_2 = parent_ref_2;
22         child_ref_2.Print();
23     }
24 }
```

Error-javaconcept.Parent cannot be converted to javaconcept.Child