

Java Concept 65

- For no errors While extending abstract parent class to child class
 - All of parent class abstract method must be overridden in child class
 - Child class must be made abstract using abstract key word

```
1 //Overriding abstract method
2 //Not making child class abstract
3 abstract class Java
4 {
5     abstract void fun();
6 }
7
8 class JavaConcept extends Java
9 {
10     void fun()
11     {...}
14 }
```

```
1 //Not Overriding abstract method
2 //Making child class abstract
3 abstract class Java
4 {
5     abstract void fun();
6 }
7
8 abstract class JavaConcept extends Java
9 {
10
11 }
```

```

1 //All abstract parent class method is not
2 //overridden in child class // Error
3 abstract class Parent {
4     Parent() { System.out.println(C.B+
5         "Parent Constructor Called"+C.RE); }
6     abstract void fun();
7 }
8 class Child extends Parent {
9     Child() { System.out.println(C.Y+
10         "Child Constructor Called"+C.RE); }
11 }
12
13 class JavaConcept
14 {
15     public static void main(String[] args)
16     {
17         Child obj = new Child();
18         obj.fun();
19     }
20 }

```

Error 1 - java.lang.ExceptionInInitializerError

Error 2 - javaconcept.Child is not abstract and does not override abstract method fun() in javaconcept.Parent

```

1 //All abstract parent class method is overridden
2 //in child class // No Error
3 abstract class Parent {
4     Parent() { System.out.println(C.B+
5         "Parent Constructor Called"+C.RE); }
6     abstract void fun();
7 }
8 class Child extends Parent {
9     Child() { System.out.println(C.Y+
10         "Child Constructor Called"+C.RE); }
11     void fun() { System.out.println(C.Y+
12         "Child fun() called"+C.RE); }
13 }
14
15 class JavaConcept
16 {
17     public static void main(String[] args)
18     {
19         Child obj = new Child();
20         obj.fun();
21     }
22 }

```

run:

Parent Constructor Called

Child Constructor Called

Child fun() called

```
1 //Making Child class abstract
2 // No Error
3 abstract class Parent {
4     Parent() { System.out.println(C.B+
5         "Parent Constructor Called"+C.RE); }
6     abstract void fun();
7 }
8
9 abstract class Child extends Parent {
10     Child() { System.out.println(C.Y+
11         "Child Constructor Called"+C.RE); }
12 }
13
14 class JavaConcept
15 {
16     public static void main(String[] args)
17     {
18
19     }
20 }
```

run:

BUILD SUCCESSFUL (total time: 0 seconds)