# **Polymorphism**

Polymorphism is the capability of a method to do different things based on the object that it is acting upon. In other words, polymorphism allows you define one interface and have multiple implementations.

**Types of Polymorphism:**

1. Static Polymorphism / Compile time polymorphism
2. Dynamic Polymorphism / Run time polymorphism

Method overloading is static polymorphism.

Method overriding is dynamic polymorphism.

**Example:**

**Man.java**

**package** FPPackage;

**public** **class** Man {

**public** **void** action() {

System.***out***.println("Crawl, Walk and Run");

}

}

**Child.java**

**package** FPPackage;

**public** **class** Child **extends** Man{

**public** **void** action() {

System.***out***.println("Crawl");

}

**public** **static** **void** main(String[] args) {

Man m = **new** Child();

m.action();

}

}

**Youngster.java**

**package** FPPackage;

**public** **class** Youngster **extends** Man{

**public** **void** action() {

System.***out***.println("Walk and Run");

}

**public** **static** **void** main(String[] args) {

Man m = **new** Youngster();

m.action();

}

}

**Oldman.java**

**package** FPPackage;

**public** **class** Oldman **extends** Man{

**public** **void** action() {

System.***out***.println("Walk");

}

**public** **static** **void** main(String[] args) {

Man m = **new** Oldman();

m.action();

}

}