```
//Variables
public class Eg1 {

static int x = 5;
int y = 10;

public static void main(String[] args) {

int a = 10, b = 20;

System.out.println("LV: " + a);
System.out.println("LV: " + b);
System.out.println("SV: " + x);
System.out.println("IV: " + new Eg1().y);
}
}
```

```
LV: 10
LV: 20
SV: 5
IV: 10
```

```java
@FunctionalInterface
interface Variables{

void sum();

}
```

```java

public class Eg1 implements Variables{

static int x = 5;
int y = 10;

public static void main(String[] args) {

new Eg1().sum();
}

@Override
public void sum() {
int a = 10, b = 20;
System.out.println(a+b); // 30
System.out.println(x+ new Eg1().y); // 15
}
}
```

```java
@FunctionalInterface
interface Addition {

void sum(int a, int b);
}
```

```java
public class Eg3 {

public static void main(String[] args) {

Addition add = (x, y) -> System.out.println("Sum is : " + (x + y));
add.sum(10,20);
}
}
```

```
Sum is : 30
```

```
@FunctionalInterface
interface Login {

void userDeatils(String uName, String password);

}
```

```
public class Eg4 {

public static void main(String[] args) {

Login add = (uN, pW) -> System.out.println("UserName is " + uN + " Password is " + pW);
add.userDeatils("Admin", "Admin");
}
}
```

```
UserName is Admin Password is Admin
```

```java
@FunctionalInterface
interface Add {

public abstract void m1();

}
```

```java
public class Eg5 {

int a;
int b;

public Eg5(int a, int b) {
this.a = a;
this.b = b;
}

public void sum() {
Add add = () -> {
System.out.println(a + b); // 30
};
add.m1();
}

public static void main(String[] args) {
new Eg5(10, 20).sum();
}
}
```

```java
interface UserName {

public String userName(String name, String password);

}
```

```java
public class Eg6 {

public static void main(String[] args) {

// (parameter 1) -> expression
UserName uName = (name, password) -> {
return name + password;
};

System.out.println(uName.userName("Admin ", "Admin"));
}
}
```

```
@FunctionalInterface
interface SignIn {

public abstract void login();

}
```

```
class UserOne implements SignIn {

@Override
public void login() {
System.out.println("Login Method Invoked");
}
}
```

```
public class Eg7 {

public static void main(String[] args) {

UserOne user = new UserOne();
user.login();

// Polymorphism Implemenation
SignIn signIn = new UserOne();
signIn.login();
}
}
```

```
Login Method Invoked
Login Method Invoked
```

```
@FunctionalInterface
interface Login {

public abstract void login();

}
```

```
public class Eg8 {

public static void main(String[] args) {

// Anonymous Inner Type Implementation
Login login = new Login() {

@Override
public void login() {
System.out.println("login() method invoked");
}
};
login.login();
}
}
```

```
login() method invoked
```

```java
@FunctionalInterface
interface Log {

public abstract void login();

}
```

```java
public class Eg9 {

public static void main(String[] args) {
Log log = () -> {
System.out.println("login() method invoked");
};
log.login();
}
}
```

```
login() method invoked
```