

### Q1.1. Write a program to show Interface Example in java?

Ans:

```
package override;
interface Animal {
    void speak();
}

class Dog implements Animal {
    public void speak() {
        System.out.println("Woof!");
    }
}

class Cat implements Animal {
    public void speak() {
        System.out.println("Meow!");
    }
}

public class Main {
    public static void main(String[] args) {
        Animal dog = new Dog();
        Animal cat = new Cat();

        dog.speak();
        cat.speak();
    }
}
```

### Q2. Write a program a Program with 2 concrete method and 2 abstract method in java ?

Ans- Don't know

### Q3. Write a program to show the use of functional interface in java?

Ans: Don't know

### Q4. What is an interface in Java?

Ans:

An interface in Java is a reference type that is used to declare a behavior that classes must implement. They are similar to protocols. Interfaces are declared using the interface keyword, and may only contain method signature and constant declarations.

### Q5. What is the use of interface in Java?

- Interfaces can be used to achieve abstraction in Java.
- Interfaces can be used to achieve multiple inheritance in Java.
- Interface can be used to achieve polymorphism in Java.
- Interfaces can be used to promote code reuse in Java

### Q6. What is the lambda expression of Java 8?

```
interface Adder {
    int add(int a, int b);
}

Adder adder = (a, b) -> a + b;
```

```
int sum = adder.add(10, 20);  
System.out.println(sum);
```

### **Q7.Can you pass lambda expressions to a method? When?**

you can pass lambda expressions to methods. This is possible because lambda expressions can be used to implement functional interfaces

```
public static void process(Runnable runnable) {  
  
    runnable.run();  
  
}
```

### **Q9.What is the benefit of lambda expressions in Java 8?**

Ans: The code that uses the lambda expression is much more concise than the code that uses the Runnable object. This is because the lambda expression can be defined inline, without the need to create a new object.

### **Q10 Is it mandatory for a lambda expression to have parameters?**

No, it is not mandatory for a lambda expression to have parameters. A lambda expression can have zero, one, or multiple parameters.