What is an interface - https://docs.oracle.com/javase/tutorial/java/concepts/interface.html

Defining an Interface - https://docs.oracle.com/javase/tutorial/java/IandI/interfaceDef.html

Implementing an Interface - https://docs.oracle.com/javase/tutorial/java/IandI/usinginterface.html

Using an Interface as a Type - https://docs.oracle.com/javase/tutorial/java/IandI/interfaceAsType.html

**Exercises:**

See questions bellow.

Disclaimer: for all “**What will be the output of the following program?”** questions can have the **Compilation failure** answer.

1. **What will be the output of the following program?**

|  |  |  |
| --- | --- | --- |
| interface A  {      private int i;  } |  |  |

[**View Answer**](https://javaconceptoftheday.com/java-practice-coding-questions-on-interfaces/#collapse2)

**Answer :**  
Compilation failure: Illegal modifier for field i. Only public, static and final are allowed.

1. **What will be the output of the following program?**

|  |
| --- |
| interface A  {      void myMethod();  }    class B  {      public void myMethod()      {          System.out.println("My Method");      }  }    class C extends B implements A  {    }    class MainClass  {      public static void main(String[] args)      {          A a = new C();            a.myMethod();      }  } |

[**View Answer**](https://javaconceptoftheday.com/java-practice-coding-questions-on-interfaces/#collapse3)

**Answer :**  
My Method

1. **Can a class implement more than one interfaces?**

[**View Answer**](https://javaconceptoftheday.com/java-practice-coding-questions-on-interfaces/#collapse4)

**Answer :**  
Yes, a class can implement more than one interfaces.

1. **What will be the output of the following program?**

|  |
| --- |
| interface X  {      void methodX();  }    class Y implements X  {      void methodX()      {          System.out.println("Method X");      }  } |

[**View Answer**](https://javaconceptoftheday.com/java-practice-coding-questions-on-interfaces/#collapse5)

**Answer :**  
Compilation failure: interface methods must be implemented as public. Because, interface methods are public by default and you should not reduce the visibility of any methods while overriding.

1. **What will be the output of the following program?**

|  |
| --- |
| interface A  {      int i = 111;  }    class B implements A  {      void methodB()      {          i = 222;      }  } |

[**View Answer**](https://javaconceptoftheday.com/java-practice-coding-questions-on-interfaces/#collapse6)

**Answer :**

**Compilation failure:** because interface fields are static and final by default and you can’t change their value once they are initialized. In the above code, methodB() is changing value of interface field A.i. It shows compile time error.

1. **What will be the output of the following program?**

|  |
| --- |
| class A  {      //Class A  }    interface B extends A  {      //Interface B extending Class A  } |

[**View Answer**](https://javaconceptoftheday.com/java-practice-coding-questions-on-interfaces/#collapse7)

**Answer :**

**Compilation failure:** An interface can extend another interface not the class.

1. **What will be the output of the following program?**

|  |
| --- |
| interface P  {      String p = "PPPP";        String methodP();  }    interface Q extends P  {      String q = "QQQQ";        String methodQ();  }    class R implements P, Q  {      public String methodP()      {          return q+p;      }        public String methodQ()      {          return p+q;      }  }    public class MainClass  {      public static void main(String[] args)      {          R r = new R();            System.out.println(r.methodP());            System.out.println(r.methodQ());      }  } |

[**View Answer**](https://javaconceptoftheday.com/java-practice-coding-questions-on-interfaces/#collapse8)

**Answer :**  
QQQQPPPP  
PPPPQQQQ

1. **Can interfaces have constructors?**

[**View Answer**](https://javaconceptoftheday.com/java-practice-coding-questions-on-interfaces/#collapse9)

**Answer :**  
No. Interfaces can’t have constructors.

1. **What will be the output of the following program?**

|  |  |
| --- | --- |
|  | class A implements B  {      public int methodB(int i)      {          return i =+ i \* i;      }  }    interface B  {      int methodB(int i);  }    public class MainClass  {      public static void main(String[] args)      {          B b = new A();            System.out.println(b.methodB(2));      }  } |

[**View Answer**](https://javaconceptoftheday.com/java-practice-coding-questions-on-interfaces/#collapse10)

**Answer :**  
Output will be 4

1. **Can you find out the errors in the following code?**

|  |
| --- |
| interface A  {      {          System.out.println("Interface A");      }        static      {          System.out.println("Interface A");      }  } |

[**View Answer**](https://javaconceptoftheday.com/java-practice-coding-questions-on-interfaces/#collapse11)

**Answer :**  
Interfaces can’t have initializers.

1. **How do you access interface field ‘i’ in the below code?**

|  |
| --- |
| class P  {      interface Q      {          int i = 111;      }  } |

[**View Answer**](https://javaconceptoftheday.com/java-practice-coding-questions-on-interfaces/#collapse12)

**Answer :**  
P.Q.i

1. **Like classes in java, Interfaces also extend java.lang.Object class by default. True OR False?**

[**View Answer**](https://javaconceptoftheday.com/java-practice-coding-questions-on-interfaces/2/#collapse13)

**Answer :**  
False. Interfaces don’t extend Object class.

1. **Does below program compile successfully?**

|  |
| --- |
| interface ABC  {      public void methodOne();        public void methodTwo();  }    interface PQR extends ABC  {      public void methodOne();        public void methodTwo();  } |

[**View Answer**](https://javaconceptoftheday.com/java-practice-coding-questions-on-interfaces/2/#collapse14)

**Answer :**  
Yes, program compiles successfully.

1. **What will be the output of the following program?**

|  |
| --- |
| interface X  {  int i = 1;  int methodX();  }  class Y implements X  {  {  System.out.println(i);  }  public int methodX()  {  int i = this.i;  return ++i;  }  }  class MainClass  {  public static void main(String[] args)  {  Y y = new Y();  System.out.println(y.methodX());  System.out.println(y.i);  System.out.println(X.i);  }  } |

[**View Answer**](https://javaconceptoftheday.com/java-practice-coding-questions-on-interfaces/2/#collapse17)

**Answer :**  
1

2

1

1

1. **Can you identify the error in the below code?**

|  |
| --- |
| interface A  {      void methodA();  }    class B implements A  {      public void methodA()      {          interface C          {              int i = 123;          }      }  } |

[**View Answer**](https://javaconceptoftheday.com/java-practice-coding-questions-on-interfaces/2/#collapse18)

**Answer :**  
Interfaces can’t be local members of a method.

1. **Can we declare an interface as ‘abstract’?**

[**View Answer**](https://javaconceptoftheday.com/java-practice-coding-questions-on-interfaces/2/#collapse19)

**Answer :**  
Yes, interfaces can be declared as ‘abstract’. But, there is no need to declare like that because interfaces are ‘abstract’ by default.

1. **What will be the output of the following program?**

|  |
| --- |
| interface One {  String s = "FINAL";  String methodONE();  }  interface Two {  String methodONE();  }  abstract class Three {  String s = "NOT FINAL";  public abstract String methodONE();  }  class Four extends Three implements One, Two {  public String methodONE() {  String s = super.s + " " + One.s;  return s;  }  }  class MainClass {  public static void main(String[] args) {  Four four = new Four();  System.out.println(four.methodONE());  One one = four;  System.out.println(one.s);  System.out.println(one.methodONE());  Two two = new Four();  System.out.println(two.methodONE());  }  } |

[**View Answer**](https://javaconceptoftheday.com/java-practice-coding-questions-on-interfaces/2/#collapse20)

**Answer :**  
NOT FINAL FINAL

FINAL

NOT FINAL FINAL

NOT FINAL FINAL

1. **What will be the output of the following program?**

|  |
| --- |
| interface A  {      String A = "AAA";        String methodA();  }    interface B  {      String B = "BBB";        String methodB();  }    class C implements A, B  {      public String methodA()      {          return A+B;      }        public String methodB()      {          return B+A;      }  }    class D extends C implements A, B  {      String D = "DDD";        public String methodA()      {          return D+methodB();      }  }    public class MainClass  {      public static void main(String[] args)      {          C c = new C();            System.out.println(c.methodA());            System.out.println(c.methodB());            c = new D();            System.out.println(c.methodA());            System.out.println(c.methodB());      }  } |

[**View Answer**](https://javaconceptoftheday.com/java-practice-coding-questions-on-interfaces/3/#collapse26)

**Answer :**  
AAABBB  
BBBAAA  
DDDBBBAAA  
BBBAAA

1. **What will be the output of the following program?**

|  |
| --- |
| interface X  {      void methodX();        interface Y      {          void methodY();      }  }    class Z implements X, X.Y  {      {          methodX();            System.out.println(1);      }        public void methodX()      {          methodY();            System.out.println(2);      }        public void methodY()      {          System.out.println(3);      }  }      public class MainClass  {      public static void main(String[] args)      {          Z z = new Z();            z.methodX();            z.methodY();            X x = z;            x.methodX();      }  } |

[**View Answer**](https://javaconceptoftheday.com/java-practice-coding-questions-on-interfaces/3/#collapse27)

**Answer :**  
Yes, program is correct. Output will be,  
3  
2  
1  
3  
2  
3  
3  
2

1. **Can you identify the error in the below code?**

|  |
| --- |
| class A implements A.B  {      static interface B      {          void methodB();      }  } |

[**View Answer**](https://javaconceptoftheday.com/java-practice-coding-questions-on-interfaces/3/#collapse28)

**Answer :**  
Cycle detected. Any class cannot extend itself or its member types.

1. **What will be the output of the following program?**

|  |
| --- |
| abstract class A  {      abstract void myMethod(Number N);  }    interface B  {      abstract void myMethod(Object O);  }    class C extends A implements B  {      void myMethod(Number N)      {          System.out.println("Number");      }        public void myMethod(Object O)      {          System.out.println("Object");      }  }    public class MainClass  {      public static void main(String[] args)      {          A a = new C();            a.myMethod(new Integer(121));            B b = new C();            b.myMethod(new Integer(121));            C c = new C();            c.myMethod(new Integer(121));      }  } |

[**View Answer**](https://javaconceptoftheday.com/java-practice-coding-questions-on-interfaces/3/#collapse32)

**Answer :**  
Number  
Object  
Number

1. **What will be the output of the following program?**

|  |
| --- |
| class A { }    class B extends A { }    class C extends B { }    interface ABC  {      void method(A a);  }    interface PQR  {      void method(B b);  }    class M implements ABC, PQR  {      public void method(A a)      {          System.out.println(2);      }        public void method(B b)      {          System.out.println(3);      }  }    public class MainClass  {      public static void main(String[] args)      {          M m = new M();            m.method(new A());            m.method(new B());            m.method(new C());      }  } |

[**View Answer**](https://javaconceptoftheday.com/java-practice-coding-questions-on-interfaces/3/#collapse34)

**Answer :**  
2  
3  
3