Assignment – Interface

Write an answer of below question and send it for review.

1] Why the below code is showing compile time error?

```
1    interface X
2    {
3        void methodX();
4    }
5
6    class Y implements X
7    {
8        void methodX()
9        {
10           System.out.println("Method X");
11       }
12   }
```

2] Does below code compile successfully? If not, why?

```
1    interface A
2    {
3        int i = 111;
4    }
5
6    class B implements A
7    {
8        void methodB()
9        {
10           i = 222;
11       }
12   }
```

3] Is the following code written correctly?

```
1    class A
2    {
3        //Class A
4    }
5
6    interface B extends A
7    {
8        //Interface B extending Class A
9    }
```

4] What will be the output of the following program?

```
1    interface P
2    {
3        String p = "PPPP";
4
5        String methodP();
6    }
7
8    interface Q extends P
9    {
10       String q = "QQQQ";
11
12       String methodQ();
13   }
14
15   class R implements P, Q
16   {
17       public String methodP()
18       {
19           return q+p;
20       }
21
22       public String methodQ()
23       {
24           return p+q;
25       }
26   }
27
28   public class MainClass
29   {
30       public static void main(String[] args)
31       {
32           R r = new R();
33
34           System.out.println(r.methodP());
35
36           System.out.println(r.methodQ());
37       }
38   }
```

5]) Is the below program written correctly? If yes, what will be the output?

```java
1    class A implements B
2    {
3        public int methodB(int i)
4        {
5            return i =+ i * i;
6        }
7    }
8
9    interface B
10   {
11       int methodB(int i);
12   }
13
14   public class MainClass
15   {
16       public static void main(String[] args)
17       {
18           B b = new A();
19
20           System.out.println(b.methodB(2));
21       }
22   }
```

6] What is an interface in Java?

7] Which modifiers are allowed for methods in an Interface?

8] Suppose A is an interface. Can we create an object using new A()?

9] Can an interface extends another interface in Java?