

final keyword

1. Find Output

What is the use of final keyword in Java?

- a) When a class is made final, a subclass of it can not be created
- b) When a method is final, it can not be overridden
- c) When a variable is final, it can be assigned value only once
- d) all

Output

Ans: d

2. Find Output

```
class Main {  
    public static void main(String args[]){  
        final int i;  
        i = 20;  
        System.out.println(i);  
    }  
}
```

Output

- a) 20
- b) Compiler Error
- c) 0
- d) Garbage value

Ans: a

There is no error in the program. final variables can be assigned value only once. In the above program, i is assigned a value as 20, so 20 is printed.

3. Find Output

```
class Main {  
    public static void main(String args[]){  
        final int i;  
        i = 20;  
        i = 30;  
        System.out.println(i);  
    }  
}
```

Output

- a) 20
- b) Compiler Error
- c) 30
- d) Garbage value

Ans: b

i is assigned a value twice. Final variables can be assigned values only one. Following is the compiler error "Main.java:5: error: variable i might already have been assigned"

4. Find Output

```
class Base {  
    public final void show() {  
        System.out.println("Base::show() called");  
    }  
}  
  
class Derived extends Base {  
    public void show() {  
        System.out.println("Derived::show() called");  
    }  
}  
  
public class Main {  
    public static void main(String[] args) {  
        Base b = new Derived();  
        b.show();  
    }  
}
```


Output

- a) Derived::show() called
- b) Base::show() called
- c) Compiler Error
- d) Exception

Ans) c

5. Find Output

```
public class Test
{
    final int assign = 30;

    public static void main(String[] args)
    {
        final int result = 20;
        final int assign;

        Test f = new Test();
        assign = 20;

        System.out.print(assign+" ");
        System.out.print(f.assign+" ");
        System.out.println(f.process(result));
    }

    int process(int a)
    {
        return a + 5;
    }
}
```

Output

- a) 20 30 25
- b) Compilation error
- c) Exception
- d) 20 20 25

ans) a

6. Find Output

```
public class Test
{
    public static void main(String[] args)
    {
        final int assign;
        System.out.print(assign+" ");
    }
}
```

Output

- a) Compilation error
- b) Exception
- c) 0
- d) Garbage value

Ans: a

7. Find Output

```
public class Test
{
    final static short i = 2;
    public static int j = 0;

    public static void main(String [] args)
    {
        for (int k = 0; k < 3; k++)
        {
            switch (k)
            {
                case i: System.out.print(" 0 ");
                case i-1: System.out.print(" 1 ");
                case i-2: System.out.print(" 2 ");
            }
        }
    }
}
```

Output

a) 2 1 2 0 1 2

b) 2 1 0 1 0 0

c) 0 1 2 1 2 2

d) Compilation error

Ans: a

8. Find Output

```
public class Test
{
    final static short i = 2;
    public static int j = 0;

    public static void main(String [] args)
    {
        for (int k = 0; k < 3; k++)
        {
            switch (k)
            {
                case i: System.out.print(" 1 ");
                case i - 1: System.out.print(" 2 ");
                case i - 2: System.out.print(" 0 ");
            }
        }
    }
}
```


Output

a) 0 2 0 1 2 0

b) 0 1 2 0 2 0

c) 2 1 0 1 0 0

d) Compilation error

Ans: a

Find Output

Output