Given code of Test.java file:

```
import java.nio.file.Path;
import java.nio.file.Paths;

public class Test {
    public static void main(String[] args) {
        Path path = Paths.get("F:\A\B\C\Book.java");
        System.out.println(path.subpath(1,4));
    }
}
```

- A A B C
- B $A\B\C\Book.java$
- C B\C\Book.java
- D Exception is thrown at runtime

F: is accessible for reading/writing and below is the directory structure for F:

```
F:.
Parent
a.txt
b.txt
Child
c.txt
d.txt
```

Given code of Test.java file:

```
import java.io.IOException;
import java.nio.file.Files;
import java.nio.file.Path;
import java.nio.file.Paths;
import java.nio.file.attribute.BasicFileAttributes;
import java.util.function.BiPredicate;
import java.util.stream.Stream;
public class Test {
   public static void main(String[] args) throws IOException {
       Path root = Paths.get("F:");
       BiPredicate<Path, BasicFileAttributes> predicate = (p,a) ->
       p.toString().endsWith("txt");
       try(Stream<Path> paths = Files.find(root, 2, predicate))
           paths.forEach(System.out::println);
       }
   }
}
```

What will be the result of compiling and executing Test class?

- A Above program executes successfully and prints nothing on to the console.
- B Above program executes successfully and prints below lines on to the console:

```
F:Parent\a.txt
F:Parent\b.txt
```

C - Above program executes successfully and prints below lines on to the console:

```
F:Parent\Child\c.txt
F:Parent\Child\d.txt
```

F:Parent\a.txt
F:Parent\b.txt

C: is accessible for reading/writing and below is the content of 'C:\TEMP' folder:

```
C:\TEMP
| msg
| Parent
| Child
| Message.txt
```

'msg' is a symbolic link file for 'C:\TEMP\Parent\Child\Message.txt'.

Message.txt contains following text: Welcome!

Given code of Test.java file:

- A Program executes successfully and produces no output
- B An exception is thrown at runtime
- C Compilation error
- D Program executes successfully and prints 'Welcome!' on to the console

Given code of Test.java file:

F: is accessible for reading and contains 'Book.java' file.

Which of the following statements, if used to replace /*INSERT*/, will successfully print contents of 'Book.java' on to the console? Select 3 options.

A - Files.

lines(Paths.get("F:\Book.java")).stream().forEach(System.out::println);

В-

Files.readAllLines(Paths.get("F:\Book.java")).forEach(System.out::println);

C -

Files.readAllLines(Paths.get("F:\Book.java")).stream().forEach(System.out:: println);

D - Files.lines(Paths.get("F:\Book.java")).forEach(System.out::println);

Given code of Test.java file:

```
import java.io.IOException;
import java.nio.file.Files;
import java.nio.file.Path;
import java.nio.file.Paths;
import java.util.stream.Stream;

public class Test {
    public static void main(String[] args) throws IOException {
        Stream<Path> files =
            Files.list(Paths.get(System.getProperty("user.home")));
        files.forEach(System.out::println);
    }
}
```

System.getProperty("user.home") returns the HOME directory of the User (Both in windows and Linux).

- A It will only print the paths of files (not directories) under HOME directory.
- B It will print the paths of files (not directories) under HOME directory and its sub-directories.
- C It will print the paths of directories, sub-directories and files under HOME directory.
- D It will only print the paths of directories and files under HOME directory.

Given code of Test.java file:

```
import java.nio.file.Path;
import java.nio.file.Paths;

public class Test {
    public static void main(String[] args) {
        Path path1 = Paths.get("F:\A\B\C");
        Path path2 = Paths.get("F:\A");
        System.out.println(path1.relativize(path2));
        System.out.println(path2.relativize(path1));
    }
}
```

What will be the result of compiling and executing Test class?

```
A -

B\C
..\..

B - Compilation error

C -
..\..

B\C
```

D - An exception is thrown at runtime

```
Given code of Test.java file:
```

```
import java.nio.file.Path;
import java.nio.file.Paths;

public class Test {
    public static void main(String[] args) {
        Path path1 = Paths.get("C:\A\B\C");
        Path path2 = Paths.get("D:\A");
        System.out.println(path1.relativize(path2));
        System.out.println(path2.relativize(path1));
    }
}
```

What will be the result of compiling and executing Test class?

A -

B\C

..\..

B - Compilation error.

C - An exception is thrown at runtime

D-

..\..

B∖C

F: is accessible for reading and below is the directory structure for F:

```
F:.

L—A

L—B

L—C

Book.java
```

'Book.java' file is available under 'C' directory.

Given code of Test.java file:

```
import java.nio.file.Path;
import java.nio.file.Paths;

public class Test {
    public static void main(String[] args) {
        Path file = Paths.get("F:\A\B\Book.java");
        System.out.println(file.toAbsolutePath());
    }
}
```

- A $F:\A\B\setminus Book.java$
- B Book.java
- C FileNotFoundException is thrown at runtime.
- D NoSuchFileException is thrown at runtime.

F: is accessible for reading and below is the directory structure for F:

Which of the following statements, if used to replace /*INSERT*/, will successfully print 'true' on to the console? Select 3 options.

- A System.out.println(Files.getAttribute(path, "isDirectory"));
- B System.out.println(path.toFile().isDirectory());
- C System.out.println(Files.isDirectory(path));

}

- D System.out.println(new File(path).isDirectory());
- E System.out.println(File.isDirectory(path));

 $C:\$ is accessible for reading/writing and below is the content of 'C:\TEMP' folder:

```
C:\TEMP
| msg
| Parent
| Child
| Message.txt
```

'msg' is a symbolic link file for 'C:\TEMP\Parent\Child\Message.txt'.

Given code of Test.java file:

```
import java.io.IOException;
import java.nio.file.Files;
import java.nio.file.Path;
import java.nio.file.Paths;

public class Test {
    public static void main(String[] args) throws IOException {
        Path src = Paths.get("C:", "TEMP", "msg");

        Path tgt = Paths.get("C:", "TEMP", "Parent", "copy");
        Files.copy(src, tgt);

        System.out.println(Files.isSymbolicLink(src) + ":" +
        Files.isSymbolicLink(tgt));
    }
}
```

- A false:false
- B true:false
- C false:true
- D true:true

F: is accessible for reading/writing and below is the directory structure for F:

```
F:.
└___X
```

Directory X exists under F:.

Given code of Test.java file:

```
import java.io.IOException;
import java.nio.file.Files;
import java.nio.file.Path;
import java.nio.file.Paths;

public class Test {
    public static void main(String[] args) throws IOException{
        Path path = Paths.get("F:\X\Y\Z");
        Files.createDirectory(path);
    }
}
```

- A An exception is thrown at runtime.
- B Directory Y will be created under X and directory Z will be created under Y.
- C Only directory Y will be created under X.

Given code of Test.java file:

F: is accessible for reading/writing but is currently blank.

What will be the result of compiling and executing Test class?

```
A - 4, C, B
```

B - Runtime Exception

C - 4, null, B

D - 3, C, B

E - 3, C, C

Below is the directory structure for F:

- A java.nio.file.FileAlreadyExistsException is thrown at runtime
- B 'Book.java' will be copied successfully to 'F:\A\B\' directory
- C Program terminates successfully without copying 'Book.java' file
- D java.io.FileNotFoundException is thrown at runtime

F: is accessible for reading and below is the directory structure for F:

```
F:.

L—A

L—B

L—C

Book.java
```

'Book.java' file is available under 'C' directory.

Given code of Test.java file:

```
import java.nio.file.Path;
import java.nio.file.Paths;

public class Test {
    public static void main(String[] args) {
        Path file = Paths.get("Book.java");
        System.out.println(file.toAbsolutePath());
    }
}
```

Actual path of generated class file is: "C:\classes\Test.class".

- A F:\A\B\Book.java
- B FileNotFoundException is thrown at runtime.
- C C:\classes\Book.java
- D NoSuchFileException is thrown at runtime.

F: is accessible for reading and below is the directory structure for F:

```
F:.

process

file.txt

file.docx

file.pdf
```

Above 3 files contain HELLO as the only word in the files. "file.txt" is a text file, "file.docx" is a Microsoft Word document and "file.pdf" is a PDF file.

Given code of Test.java file:

```
import java.io.IOException;
import java.nio.file.Files;
import java.nio.file.Path;
import java.nio.file.Paths;
import java.util.stream.Stream;
public class Test {
   public static void main(String[] args) throws IOException {
       Stream<Path> paths = Files.walk(Paths.get("F:\process"));
       paths.filter(path -> !Files.isDirectory(path)).forEach(
           path -> {
               try {
                   Files.readAllLines(path).stream()
                          .forEach(System.out::println);
               } catch (IOException e) {
                   System.out.println("FAILED");
           }
       );
   }
```

- A FAILED will be printed three times
- B HELLO will be printed twice and FAILED will be printed once
- C HELLO will be printed once and FAILED will be printed twice
- D HELLO will be printed three times on to the console

 $C:\$ is accessible for reading/writing and below is the content of 'C:\TEMP' folder:

```
C:\\TEMP
| msg
| Parent
| Child
| Message.txt
```

'msg' is a symbolic link file for 'C:\TEMP\Parent\Child\Message.txt'.

Given code of Test.java file:

```
import java.io.IOException;
import java.nio.file.Files;
import java.nio.file.Path;
import java.nio.file.Paths;

public class Test {
    public static void main(String[] args) throws IOException {
        Path src = Paths.get("C:", "TEMP", "msg");
        Files.delete(src);
    }
}
```

- A The code executes successfully and deletes the file referred by symbolic link 'Message. txt'
- B The code executes successfully but doesn't delete anything
- C The code executes successfully and deletes symbolic link file 'msg'
- D The code executes successfully and deletes all the directories and files in the path 'C:\TEMP\Parent\Child\Message.txt'

F: is accessible for reading/writing and below is the directory structure for F:

```
F:.
└___x
```

Directory X exists under F:.

Given code of Test.java file:

```
import java.io.IOException;
import java.nio.file.Files;
import java.nio.file.Path;
import java.nio.file.Paths;

public class Test {
    public static void main(String[] args) throws IOException{
        Path path = Paths.get("F:\X\Y\Z");
        Files.createDirectories(path);
    }
}
```

- A Only directory Y will be created under X
- B An exception is thrown at runtime
- C Directory Y will be created under X and directory Z will be created under Y

Given code of Test.java file:

```
import java.nio.file.Path;
import java.nio.file.Paths;

public class Test {
    public static void main(String[] args) {
        Path path = Paths.get("F:", "user", "..", "training..");
        System.out.println(path.normalize());
    }
}
```

- A F:\training..
- B F:\user
- C F:\
- D F:\user\training

F: is accessible for reading/writing and below is the directory structure for

```
F:.
    -Parent
    └---Child
            Message.txt
   -Shortcut
        Child.lnk
    -Other
    L—Logs
Given code of Test.java file:
import java.nio.file.Path;
import java.nio.file.Paths;
public class Test {
    public static void main(String[] args) {
        Path path1 = Paths.get("F:", "Other", "Logs");
Path path2 = Paths.get("..", "..", "Shortcut", "Child.lnk",
        "Message.txt");
        Path path3 = path1.resolve(path2).normalize();
        Path path4 = path1.resolveSibling(path2).normalize();
        System.out.println(path3.equals(path4));
}
What will be the result of compiling and executing Test class?
A - true
```

B - false

C - An exception is thrown at runtime.

Given code of Test.java file:

```
import java.nio.file.Path;
import java.nio.file.Paths;
public class Test {
   public static void main(String[] args) {
       Path file1 = Paths.get("F:\A\B\C");
       Path file2 = Paths.get("Book.java");
       System.out.println(file1.resolve(file2));
       System.out.println(file1.resolveSibling(file2));
}
What will be the result of compiling and executing Test class?
A -
F:\A\B\Book.java
F:\A\B\C\Book.java
В-
Book.java
F:\A\B\Book.java
C -
Book.java
Book.java
D-
F:\A\B\C\Book.java
F:\A\B\Book.java
E -
F:\A\B\C\Book.java
Book.java
```

F: is accessible for reading and below is the directory structure for F:

```
F:.

_A
_B
_C
Book.java
```

'Book.java' file is available under 'C' directory.

Given code of Test.java file:

```
import java.io.IOException;
import java.nio.file.Path;
import java.nio.file.Paths;

public class Test {
    public static void main(String[] args) throws IOException {
        Path file = Paths.get("F:\A\.\B\C\D\..\Book.java");
        System.out.println(file.toRealPath());
    }
}
```

- A Book.java
- B $F:\A\B\C\Book.java$
- C NoSuchFileException is thrown at runtime.
- D $F:\A\.\B\C\D\...$ java
- E FileNotFoundException is thrown at runtime.

Given code of Test.java file:

```
import java.nio.file.*;

public class Test {
    public static void main(String[] args) {
        Path path = Paths.get("F:\A");
        System.out.println(path.getRoot().equals(path.getParent()));
    }
}
```

What will be the result of compiling and executing Test class?

A - NullPointerException is thrown at runtime

B - false

C - true

true false

```
F: is accessible for reading/writing and below is the directory structure for
F:
F:.
  —A

____B

____C
                Book.java
Given code of Test.java file:
import java.io.IOException;
import java.nio.file.Files;
import java.nio.file.Path;
import java.nio.file.Paths;
public class Test {
    public static void main(String[] args) throws IOException{
        Path src = Paths.get("F:\A\B\C\Book.java");
        Path tgt = Paths.get("F:\A\B\Book.java");
        Path copy = Files.copy(src, tgt);
        System.out.println(Files.isSameFile(src, copy));
        System.out.println(Files.isSameFile(tgt, copy));
}
What will be the result of compiling and executing Test class?
A -
false
false
В-
true
true
C -
false
true
D -
```

Given code of Test.java file:

```
import java.nio.file.Path;
import java.nio.file.Paths;

public class Test {
    public static void main(String[] args) {
        Path path = Paths.get("F:\A\B\C\Book.java");
        System.out.println(path.subpath(1,5));
    }
}
```

- A A B C
- B Exception is thrown at runtime
- $C F:\A\B\C\Book.java$
- D A\B\C\Book.java

path.forEach(System.out::println);

```
Given code of Test.java file:
import java.nio.file.*;
import java.util.*;
public class Test {
    public static void main(String[] args) {
       Path path = Paths.get("F:\A\B\C\Book.java");
        /*INSERT*/
    }
}
Which of the following statements, if used to replace /*INSERT*/, will print
below output on to the console?
В
C
Book.java
Select ALL that apply.
A -
for(int i = 6; i < path.getNameCount(); i++) {</pre>
  System.out.println(path.getName(i));
В-
Iterator<Path> iterator = path.iterator();
while(iterator.hasNext()) {
  System.out.println(iterator.next());
}
C -
for(Path p : path) {
  System.out.println(p);
}
D-
```

F: is accessible for reading/writing and below is the directory structure for F:

```
F:.
Parent
a.txt
b.txt
Child
c.txt
d.txt
```

Given code of Test.java file:

```
import java.io.IOException;
import java.nio.file.Files;
import java.nio.file.Path;
import java.nio.file.Paths;
import java.nio.file.attribute.BasicFileAttributes;
import java.util.function.BiPredicate;
import java.util.stream.Stream;
public class Test {
   public static void main(String[] args) throws IOException {
       Path root = Paths.get("F:");
       BiPredicate<Path, BasicFileAttributes> predicate = (p,a) ->
       p.endsWith(null);
       try(Stream<Path> paths = Files.find(root, 2, predicate))
           paths.forEach(System.out::println);
       }
   }
}
```

What will be the result of compiling and executing Test class?

A - Above program executes successfully and prints below lines on to the console:

```
F:Parent\a.txt
F:Parent\b.txt
```

- B Above program executes successfully and prints nothing on to the console
- C Above program executes successfully and prints below lines on to the console:

```
F:Parent\Child\c.txt
F:Parent\Child\d.txt
```

F:Parent\a.txt
F:Parent\b.txt

- D Above program executes successfully and prints nothing on to the console
- E Compilation error

F: is accessible for reading/writing and below is the directory structure for F:

```
F:.
Parent
a.txt
b.txt
Child
c.txt
d.txt
```

Given code of Test.java file:

```
import java.io.IOException;
import java.nio.file.Files;
import java.nio.file.Path;
import java.nio.file.Paths;
import java.nio.file.attribute.BasicFileAttributes;
import java.util.function.BiPredicate;
import java.util.stream.Stream;
public class Test {
   public static void main(String[] args) throws IOException {
       Path root = Paths.get("F:");
       BiPredicate<Path, BasicFileAttributes> predicate = (p,a) ->
       p.endsWith("txt");
       try(Stream<Path> paths = Files.find(root, 2, predicate))
           paths.forEach(System.out::println);
       }
   }
}
```

What will be the result of compiling and executing Test class?

A - Above program executes successfully and prints below lines on to the console:

```
F:Parent\Child\c.txt
F:Parent\Child\d.txt
F:Parenti\a.txt
F:Parent\b.txt
```

- B Above program executes successfully and prints nothing on to the console
- C Above program executes successfully and prints below lines on to the console:

F:Parent\a.txt
F:Parent\b.txt

```
F: is accessible for reading/writing and below is the directory structure for F:
```

```
F:.

A
Book.java

Given code of Test.java file:

import java.io.File;
import java.io.IOException;
import java.nio.file.*;

public class Test {
    public static void main(String[] args) throws IOException{
        Path path = Paths.get("F:\A\B\Book.java");
        long size1 = Files.size(path);

    File file = new File("F:\A\B\Book.java");
        long size2 = file.length();

        System.out.println(size1 == size2);
}
```

What will be the result of compiling and executing Test class?

A - Compilation error

B - false

}

C - true

F: is accessible for reading and below is the directory structure for F:

```
F:.

_A
_B
_C
Book.java
```

'Book.java' file is available under 'C' directory.

Given code of Test.java file:

```
import java.nio.file.Path;
import java.nio.file.Paths;

public class Test {
    public static void main(String[] args) {
        Path file = Paths.get("F:\A\.\B\C\D\..\Book.java");
        System.out.println(file.toRealPath());
    }
}
```

- A Compilation Error
- B $F:\A\.\B\C\D\...java$
- C Book.java
- D $F:\A\B\C\Book.java$
- E NoSuchFileException is thrown at runtime.

F: is accessible for reading/writing and below is the directory structure for F:

```
F:.
           Book.java
Book.java is a text file.
Given code of Test.java file:
import java.io.BufferedReader;
import java.io.IOException;
import java.nio.file.*;
public class Test {
   public static void main(String[] args) throws IOException{
       Path src = Paths.get("F:\A\B\Book.java");
       try(BufferedReader reader = Files.newBufferedReader(src))
       {
           String str = null;
           while((str = reader.readLine()) != null) {
               System.out.println(str);
       }
   }
```

- A Compilation error
- B Contents of Book.java are printed on to the console.
- C An exception is thrown at runtime.

Given code of Test.java file:

```
import java.nio.file.Path;
import java.nio.file.Paths;

public class Test {
    public static void main(String[] args) {
        Path path = Paths.get("F:\A\.\B\C\D\..\Book.java");
        path.normalize();
        System.out.println(path);
    }
}
```

- A $F:\A\B\C\Book.java$
- B None of the other options
- C $F:\A\B\C\D\Book.java$
- D $F:\A\.\B\C\D\.\Book.java$

F: is accessible for reading and below is the directory structure for F:

Which of the following statements, if used to replace /*INSERT*/, will successfully print creation time of 'Book.java' on to the console? Select 3 options.

- A System.out.println(Files.readAttributes(path, "*"),creationTime());
- B System.out.println(Files.readAttributes(path, BasicFileAttributes.class).creationTime());

}

- C System.out.println(Files.getAttribute(path, "creationTime"));
- D System.out.println(Files.readAttributes(path, "*").get("creationTime"));
- E System.out.println(Files.readAttributes(path, BasicFileAttributes.class).get("creationTime"));

F: is accessible for reading/writing and below is the directory structure for \mathbf{F} .

Given code of Test.java file:

```
import java.io.IOException;
import java.nio.file.*;

public class Test {
    public static void main(String[] args) throws IOException{
        Path src = Paths.get("F:\A\B");
        Path tgt = Paths.get("F:\B");
        Files.move(src, tgt, StandardCopyOption.REPLACE_EXISTING);
    }
}
```

- A An exception is thrown at runtime
- B Compilation error
- C Directory B with its contents will move successfully from 'F:\A\B' to 'F:\B'

Given code of Test.java file:

```
import java.nio.file.Path;
import java.nio.file.Paths;

public class Test {
    public static void main(String[] args) {
        Path file1 = Paths.get("F:\A\B");
        Path file2 = Paths.get("F:\A\B\C\Book.java");

        System.out.println(file1.resolve(file2).equals(file1.resolveSibling(file1));
}
```

What will be the result of compiling and executing Test class?

A - true

B - false

F: is accessible for reading and below is the directory structure for F:

```
F:.

_A
_B
_C
Book.java
```

'Book.java' file is available under 'C' directory.

Given code of Test.java file:

```
import java.nio.file.Path;
import java.nio.file.Paths;

public class Test {
    public static void main(String[] args) {
        Path file = Paths.get("F:\A\.\B\C\D\..\Book.java");
        System.out.println(file.toAbsolutePath());
    }
}
```

- A Compilation Error
- B Book.java
- C $F:\A\.\B\C\D\.\Book.java$
- D $F:\A\B\C\Book.java$
- E NoSuchFileException is thrown at runtime

F: is currently blank and accessible for Reading/Writing.

Given code of Test.java file:

```
package com.training.ocp;
import java.io.IOException;
import java.nio.file.Files;
import java.nio.file.Path;
import java.nio.file.Paths;

public class Test {
    public static void main(String[] args) throws IOException {
        Path path = Paths.get("F:", "A", "B", "File.txt");
        /*INSERT*/
    }
}
```

Test.class file is under 'C:'.

Which of the following statements, if used to replace /*INSERT*/, will successfully create the file "File.txt" under F:directory?

```
A-
Files.createDirectories(path.getParent());
Files.createFile(path.getFileName());
B-
Files.createDirectories(path);
Files.createFile(path);
C-
Files.createDirectories(path.getParent());
Files.createFile(path);
D- Files.createFile(path);
```