Answers for Debugging Exercises: Chapter 7

Find the Output

1.

```
import os
Files = ['BTech.txt', 'BCA.csv', 'BSc.docx']
for file in Files:
    print(os.path.join('C:\\Users\\Students', file))
```

Ans.

```
C:\Users\Students\BTech.txt
C:\Users\Students\BCA.csv
C:\Users\Students\BSc.docx
```

2.

```
with open("File.txt", "w") as file:
    file.write("Greetings to All !!! \n Welcome to the world of
   programming\n")
with open("File.txt") as file:
    print(file.read())
```

Ans.

```
Greetings to All !!!
 Welcome to the world of programming
```

3.

```
file=open("File.txt", "r")

file.read()

text = file.read())

print(len(text))

file.close()
```

Ans. 0

4.

```
str ="Welcome to Python Programming"

file = open("File.txt","w")

n = file.write(str)
```

```
print(n)

file.close()
```

Ans. None

5. What will be written in the file?

1. `file.write("Oxford" + " University" + "Press")`

Ans. Oxford University

2. `file.write(str(len("Oxford University Press")))`

Ans. 23

3. `file.write("Clue".replace('C', 'B')`

Ans. Blue

4. `file.write("HELLO".lower())`

Ans. hello

Find the Error

1.

```
with open("File.txt") as file
      file.write("Hello World")
with open(File.txt) as f:
data = f.read()
print(data)
```

Ans. First line, File.txt should be opened in write mode and there should be a colon as the last character

In the with block, there is no indentation

2.

```
filename = "File.txt"
file = open("filename", "r")
for line in file:
```

```
    print(line, end = ' ')
```

Ans. In second line filename should not be enclosed in double quotes

3.

```
filename = "File.txt"
file = open(filename, "r")
while True:
      print(file.readline())
```

Ans. The while loop will never end, so put a break statement as

```
if len(file.read())==0):
        break
```

4.

```
file = open("File.txt", "a")
write("Hello World again")
```

Ans. It should be file.write(…) instead of only write(…)

Fill in the Blanks and Identify the Usage of the Lines

1. `File = open("File.txt", "r")`

The above statement _____ a text file.

Ans. opens

2. `file.read()`

The above statement _____ a text file.

Ans. reads

3. `print file.readline()`

The above statement _____ a text file.

Ans. reads one line at a time from

4. `print file.readlines()`

The above statement _____ a text file.

Ans. Reads a list of lines from

5. `file.write("Welcome")`

The above statement _____ a text file.

Ans. Writes to

6. `file = open("File.txt", "w")`

The above statement _____ a text file.

Ans. Opens for writing in

7. `file.writelines(lines)`

The above statement _____ a text file.

Ans. Write lines to

8. `file = open("File.txt", "a")`

The above statement _____ a text file.

Ans. Opens for appending

9. `file.close()`

The above statement _____ a text file.

Ans. closes

10. `file.read(10)`

The above statement _____ a text file.

Ans. reads first `10` bytes from

11. `file.seek(file.tell()-10)`

The above statement _____ a text file.

Ans. Sets the file pointer 10 bytes to the left of the current position

12. `file = open("File.txt", "r+b")`

The above statement _____

Ans. opens a text file for reading as well as writing in binary mode.

13. `file.seek(-10,2)`

The above statement _____

Ans. Moves the cursor to `10` bytes before the end of the file.

14. `file.seek(20,1)`

The above statement _____

Ans. Moves the cursor to `20` bytes after the current position of the file pointer.

15. `file.seek(30,0)`

The above statement _____

Ans. Moves the cursor to `30` bytes after the beginning of the file.