

10.4 Review Questions

1. Assume the file `input.txt` is opened successfully in the following. What is the type of the variable `z` after the following code is executed:

```
file = open("input.txt", "r")
z = file.readlines()
```

- (a) list
- (b) str
- (c) file object
- (d) None of the above.
- (e) This code produces an error.

For problems 2 through 9, assume the file `foo.txt` contains the following:

```
This is
a test.
Isn't it?  I think so.
```

2. What output is produced by the following?

```
file = open("foo.txt", "r")
s = file.read()
print(s[2])
```

3. What output is produced by the following?

```
file = open("foo.txt", "r")
file.readline()
print(file.readline(), end="")
```

4. What output is produced by the following?

```
file = open("foo.txt", "r")
for line in file:
    print(line[0], end="")
```

5. What output is produced by the following?

```
file = open("foo.txt", "r")
s = file.read()
xlist = s.split()
print(xlist[1])
```

6. What output is produced by the following?

```
file = open("foo.txt")
s = file.read()
xlist = s.split('\n')
print(xlist[1])
```

7. What output is produced by the following?

```
file = open("foo.txt")
xlist = file.readlines()
ylist = file.readlines()
print(len(xlist), len(ylist))
```

8. What output is produced by the following?

```
file = open("foo.txt")
xlist = file.readlines()
file.seek(0)
ylist = file.readlines()
print(len(ylist), len(ylist))
```

9. What output is produced by the following?

```
file = open("foo.txt")
for x in file.readline():
    print(x, end=":")
```

10. What is contained in the file `out.txt` after executing the following?

```
file = open("out.txt", "w")
s = "this"
print(s, "is a test", file=file)
file.close()
```

11. What is contained in the file `out.txt` after executing the following?

```
file = open("out.txt", "w")
s = "this"
file.write(s, "is a test")
file.close()
```

12. What is contained in the file `out.txt` after executing the following?

```
file = open("out.txt", "w")
s = "this"
file.write(s + "is a test")
file.close()
```

13. What is contained in the file `out.txt` after executing the following?

```
file = open("out.txt", "w")
s = "this"
file.write("{} {} \n".format(s, "is a test"))
file.close()
```