WorkSheet: Input and Output 1

Determine what each of these code fragments does by mentally tracing the code. Write or describe the value of x at the end of each snippet of code unless the code snippet produces in an error. Assume each code snippet is run independently of previous code snippets.

The following figure should be used to answer questions 1-10. It represents a basic text file describing computer science. Each numbered item appears on its own line, and a blank line appears after each numbered item.

```
● ○ ○ □ cs_desc
```

- 1. Computer science is the study of information processes and their interactions with the world.
- 2. Computer Scientists can pursue careers designing and building software, developing effectives ways to solve computing problems and devising new and better methods of using computers to address problems in the arts, the sciences, industry, and society.
- 3. According to the 2014 Occupational Outlook Handbook, computer software engineering jobs and computer information research scientists are projected to grow the fastest and add the most new jobs over the 2012–22 decade.

Problem 1.

Problem 2.

```
fh = open("cs_desc.txt", "r")
x = fh.read()

1     fh = open("cs_desc.txt", "r")
2     lines = fh.readlines()
3     x = lines[2]
4     fh.close()
```

Problem 3.

Problem 4.

```
fh = open("cs_desc.txt", "w")
fh.write("Check_out_NAU.")
fh.close()

fh = open("cs_desc.txt", "a")
fh.close()

fh = open("cs_desc.txt", "r")

fh = open("cs_desc.txt", "r")

fh = open("cs_desc.txt", "r")
fh = open("cs_desc.txt", "r")
fh = open("cs_desc.txt", "r")
fh = open("cs_desc.txt", "r")
fh = open("cs_desc.txt", "r")
fh = open("cs_desc.txt", "r")
fh = open("cs_desc.txt", "r")
fh = open("cs_desc.txt", "r")
fh = open("cs_desc.txt", "r")
fh = open("cs_desc.txt", "a")
fh = ope
```

Problem 5.

Problem 6.

Problem 7.

Problem 8.

```
fh = open("cs_desc.txt", "r")
    x = fh.readline()
    x=len(x)
    fh = open("cs_desc.txt", "r")
    x = len(x)
    fh.close()
```

Problem 9.

Problem 10.

```
fh=open("cs_desc.txt","r+")
lines=fh.readlines()
for i in lines:
    x=i
    fh.write(i)
fh.write(i)
fh.close()

fh=open("cs_desc.txt","r+")
lines=fh.readlines()
for i in range(len(lines)):
    x=fh.write(str(i))
fh.close()
```