Challenge Problems: Input/Output

Note: All of these problems are for practice; you do not need to submit any work for a grade and you are free to discuss openly with others.

1. Carefully consider the following script:

```
age = input('How old are you? ')
print('Soon you will be', '1' + age)
```

Predict the output of this script if the user enters 20 when prompted.

2. Consider the following script:

print('Name?')
person = input()
print('Hello', person)

How might you set the prompt on the first line of the following script so that it has *exactly* the same outward behavior as the above script.

person = input(???)
print('Hello', person)

3. What is displeasing about the following script?

```
person = input('What is your name? ')
print('Hello', str(person))
```

How might you better implement this?

4. What is displeasing about the following script?

```
# goal is calculating polynomial f(x) = 4x^2 - 5x + 6
x = input('Enter x: ')
ans = 4*float(x)**2 - 5*float(x) + 6
print(ans)
```

How might you better implement this?