Part I:

Open proj02_01.py.

You will see my solution for proj01 (A simple program). Currently, the program calculates the year that someone will be 100 using arithmetic. Instead, use a loop to count from the current year up to the year that they will be 100.

```python
name = raw_input("Enter your name: ")
age = int(raw_input("Enter your age: "))
birthday = raw_input("Has your birthday happened this year? Enter
Y or N: ")

if birthday == "Y":

    # Calculates the year that the user will be 100
    year_100 = str((100 - age) + 2017)

else:

    # Calculates the year that the user will be 100
    year_100 = str((100 - age) + 2016)

print name, " will turn 100 in the year", year_100, "."
```

Here is what you are trying to do instead:

```python
name = raw_input("Enter your name: ")
age = int(raw_input("Enter your age: "))
birthday = raw_input("Has your birthday happened this year? Enter
Y or N: ")

if birthday == "Y":
    year = 2017
else:
    year = 2016

# Calculates the year that the user will be 100
# TO DO: write for or while loop that adds one year to year each
time and stops at the year that the user will be 100

print name, " will turn 100 in the year ", year_100, "."
```

Part II:

Open proj02_02.py.

Write a program that asks the user how many Fibonacci numbers to generate and then generates them.
The Fibonacci sequence is a sequence of numbers where the next number in the sequence is the sum of the previous two numbers in the sequence. The sequence looks like this: 1, 1, 2, 3, 5, 8, 13 …

Extensions:
- Use the other type of loop
- Instead of Fibonacci numbers, generate powers of 2
- Instead of Fibonacci numbers, generate all divisors of a number (*Hint*: % gives the remainder of two numbers, so 8%4 = 0, and 8%5 = 1).