Name: _____

1. (40 points) This question has two parts.

   (a) (20 points) Write a function `divisors` that takes in a positive integer and returns a list of all integers that divide that integer. For example,

   ```
   # your function goes here, but write it below

   print(divisors(9))
   print(divisors(7))
   print(divisors(24))
   ```

   should output

   ```
   [1, 3, 9]
   [1, 7]
   [1, 2, 3, 4, 6, 8, 12, 24]
   ```

   (b) (20 points) Write a function `is_prime` that takes in a positive integer and returns `True` if the integer is prime and `False` otherwise. (Recall that a prime number is a number that is a positive integer **greater than 1** that is divisible only by 1 and itself.) Hint: you can call the `divisors` function from the previous question.

   For example,

   ```
   # your divisor function and your is_prime function go here,
   # but write your is_prime function below

   print(is_prime(2))
   print(is_prime(10))
   print(is_prime(14033))
   ```

   should output

   ```
   True
   False
   True
   ```

2. (30 points) Fill in the missing Python code to produce the following plot.

```
import matplotlib.pyplot as plt

years = [2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018]   # bridger bowl year
total_snowfall = [253, 304, 388, 265, 283, 209, 194, 271, 177]   # inches
largest_snowfall = [19, 16, 19, 25, 20, 14, 13, 20, 15]          # inches

# your code here
```