Primality Function

Abby Bernhardt

22 February, 2019

My code starts with defining prime_check. Given this specific prompt, when N equals one or any composite number it returns False. In the beginning I was having a little bit of trouble understanding that we want python to return 'False', but not necessarily print it. However, the first code I had printed it and it was a nice way of debugging. After I figured that out I kept going on the prompt and figured out and if N is a composite number to put a break in the loop. This stops python from even looking further at this number and goes on to the next. Else, if N is a prime number it will return True. This piece of the code is the actual prime checker. The code block that comes after the prime checker satisfies the nth term bullet point. I created an empty list called 'primelist' and set another variable called 'numofprime' equal to the nth prime number I want python to output. The variable 'check' indicates the first number to start at, and in this case it is 2 because we know 1 is not prime. This is where the first while loop starts and said the length 'primelist' needs to be less than the 'numofprime'. I stated that prime equals false, and in a new while loop set false equal to prime using the =. I set prime equal to prime_check and made 'check' add one number each time it loops through. The numbers were appended into the 'primelist' and print out the nth prime number which again, was imputed in the 'numofprime' variable. Finally python printed the last nth term along with a print statement.