Lecture 11

A Challenge

- Write numbers in the following sentence so the sentence becomes true. This sentence has __ zeros, __ ones, __ twos, __ threes, __ fours, __ fives, __ sixes, __ sevens, __ eights, and __ nines.

A Challenge

- Write numbers in the following sentence so the sentence becomes true. This sentence has **6** zeros, **2** ones, **1** twos, **0** threes, **0** fours, **0** fives, **1** sixes, **0** sevens, **0** eights, and **0** nines.

Problems

- Given 2 dates d1, m1, y1 and d2, m2, y2
- Determine which date is earliest.
- Determine how many days later the other one is.

Problems

- Given a date d, m, y write it out in this format.
- 1, 2, 2010 is written 1st February 2010.
- 13, 4, 2019 is written 13th April 2019
- 2, 5, 2018 is written 2nd May 2018

Problems

- How many Sundays fell on the first of the month during the twentieth century (1 Jan 1901 to 31 Dec 2000)?

Problems

- Suppose you have a positive integer N, we would like to know how many pairs of positive integers $0 \leq a \leq b$ there are where a*a + b*b = N. Write a program to find out.

Problems

- A Pythagorean triple consists of 3 natural numbers a, b and c where a*a + b*b = c*c

- Write a function to determine if 3 values a, b, c form such a triple.

- There is one such triple where a+b+c = 1000, write a program to find it.

Important notice

- Next week the lecture on Monday is cancelled but the tutorial on Tuesday will be take place. You can use the time next Monday to work on some of today’s problems.