Passport exercise

3: Passport class

Private fields

- int **LEGAL_ADULT_AGE** = 18 [constant]
- int **SENIOR_CITIZEN_AGE** = 65 [constant]
- double **AVERAGE_HEIGHT** = 5.5 [constant]
- string **firstName**
- string **lastName**
- double **height**
- Date **dateOfBirth**
- StreetAddress **address**

Public methods

- Constructor
  - **Passport**(string, string, double, Date, StreetAddress)
- Field getter methods (5)
- Calculated getter methods
  - string **getFullName**()
  - int **getAgeInYears**()
  - int **getAgeInMonths**()
  - int **getAgeInDays**()
  - bool **isYouth**()
    - Return true if and only if the person is younger than LEGAL_ADULT_AGE
  - bool **isWorkingAge**()
    - Return true if and only if the person is at least as old as LEGAL_ADULT_AGE, and is younger than SENIOR_CITIZEN_AGE
  - bool **isSeniorCitizen**()
    - Return true if and only if the person is at least as old as SENIOR_CITIZEN_AGE
  - bool **canVote**()
    - Return true if and only if the person is at least as old as LEGAL_ADULT_AGE
  - double **getHeightDifferenceFromAverage**()
    - Return the difference between the person's height and AVERAGE_HEIGHT
    - This should be positive if and only if the person is taller than average
- Other methods
  - string **toString**()
    - Return string description of object's fields
    - Example: "Raj Patel: Height = 1.8 meters, Date of birth = January 1, 2000, Address = 1234 Main Street, Springfield, Canada"
  - void **display**()
    - Display the result of toString() in the console