BLG102E LAB SESSION
WEEK 12

(1) 2D Vectors

- Represent 2D vectors with a struct, use dynamic memory allocation for vectors
- Implement following functions for 2D Vectors
  - printVector
  - addVectors //res = f(op1,op2), res will be created
  - substractVectors //res = f(op1,op2), res will be created
  - angleOfVector
  - angleBetweenVectors
  - magnetudeOfVector
  - dotProduct //|a||b|cos(theta)

(2) Extended Time

- Write the following structs
  - Time which represents time in (hour,minute,second)
  - Date which represents time in (year,month,day)
  - ExtendedTime represents both Date and Time
- Dynamic allocation for Time, Date and ExtendedTime
- Write the following function
  - Addition or substraction between Time’s
  - Addition or substraction between Date’s
  - Addition or substraction between ExtendedTime’s
  - Print ExtendedTime