1. Create two different structures: point and triangle. Structure point contains 2-real values to define a point on xy-plane and triangle contains three points.
   Write a program which takes three points as input and checks if the points forming a triangle or not. If yes, then compute the length of all sides of the triangle. [Note: A triangle is valid if sum of its two sides is greater than the third side.]
2. Create a structure to specify data on students given below:
   Roll number, Name, Department, Year of joining.
   Assume that the data is collected for the years 2015, 2016, 2017 and 2018 for four different departments, namely, Civil, Mechanical, Economics and Maths. Each department has total 10 enrollments year-wise.
   a) Write a function to print names of all students who joined in a particular year.
   b) Write a function to print the data of a student whose roll number is received by the function.
3. A record contains name of a cricketer, her age, and number of test matches that she has played and the average runs that she has scored in each test match. Create an array of structures to hold records of 20 such cricketers and then write a program to read these records and arrange them in ascending order by average runs. Use any sorting algorithm of your choice.
4. Create a structure to specify data of customers in a bank. The data to be stored is: Account number, Name, Balance in account. Assume maximum of 15 customers in the bank.
   (a) Write a function to print the Account number and name of each customer with balance below Rs. 100.
   (b) If a customer request for withdrawal or deposit, it is given in the form: Acct. no, amount, code (1 for deposit, 0 for withdrawal)

   Write a program to give a message, "The balance is insufficient for the specified withdrawal".
5. Write a program to create an array of pointers to string where the strings are entered through keyboard. Now sort the pointers to point to strings in alphabetical order. Use malloc() for dynamic allocation of memory and the function free() for deallocation.