

Task 1:

Create two classes **DM** and **DB** which store the values of distances. **DM** stores distances in **meter** and **centimeters** and **DB** in **feet** and **inches**. Write a program **add_dist** that can read values for the class objects and add one object of **DM** with another object of **DB**. The objects that stores the results maybe a **DM** object or **DB** object, depending on the units in which the results are required. The display should be in format of feet and inches or meters and centimeters depending on the objects on display. Also modify the **add_dist** function as **add_dist_ret** that returns the sum of the objects as an object.

Task 2:

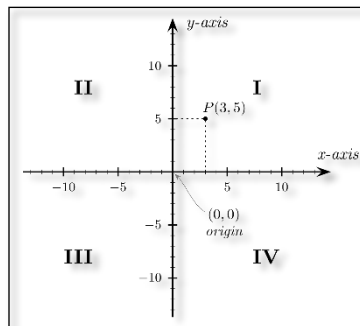
In the game of contract bridge, each of **four** players is dealt 13 cards, thus exhausting the entire deck. Modify the given program dec.cpp so that, after shuffling the deck, it deals four hands of 13 cards each.

Each of the four players' hands should then be displayed in serial (you can get the idea of the serial from the code).

Task 3:

Write a **Coord** class which holds a coordinate value in **cartesian system**. Write constructor functions **Coord()** and **Coord(double x, double y)**

- Write a **setter function** void **setCoordInPolar**(double distance, double angleInDegree). [Hint: You can use Math.h header library for necessary trigonometric functions]
- Write a **member function** int **getQuadrants()** which return the quadrant of the coordinate.



- Write a **member function** double **distance(const Coord other)** which will return the distance from the **other** Coord Object.
- Write other necessary member functions to complete the above tasks.