Based on the previous implementation of the 3-dimensional vector class. Please implement the convertions to spherical coordinate: **r(), theta(), phi()**, where

For the arctan() math function, please use atan2() to take into account the correct quadrant. Then allow the later part of the template code can be executed accordingly, and have the following two lines to be printed:

v1 in spherical coordinate: (7.0711, 0.785398, 0.9273)

v2 in spherical coordinate: (9.3835, 1.840479, 0.9583)