1. Define a class **Vector** with three private attributes **coeff\_X**​, **coeff\_Y** and **coeff\_Z** that represent its coefficients along the three axes respectively.
2. Define a member function **void print()** that will print the Vector in standard form. For example 2i+3j+7k represents a vector with coefficients 2, 3 and 7 along X, Y and Z axes respectively.
3. Define a member function **Vector add (Vector a)** that will return another Vector that is sum of Vector **a** and the caller Vector.
4. Write a member function in Vector class to implement the dot product. Design its parameters and return type appropriately.
5. Write a main() function to demonstrate the functionality implemented in questions 1-4.
6. Define a class **VectorList** with a private attribute **vectors** that represent an array of vectors. Another private attribute **n** represents the number of vectors in the VectorList.
7. Define a function **void append(Vector a)** in **VectorList** to append a vector at the end of its list of vectors.
8. Define a function **void set(Vector a[], int count)** in **VectorList** to set the list of vectors in VectorList.
9. Define a function **Vector add()** in **VectorList** that will return sum of all the vectors in the VectorList.
10. Define a function **void print()** that will print all the vectors in VectorList. Each vector should be printed in a separate line.
11. Write a main() function to demonstrate the functionality implemented in questions 6-10.