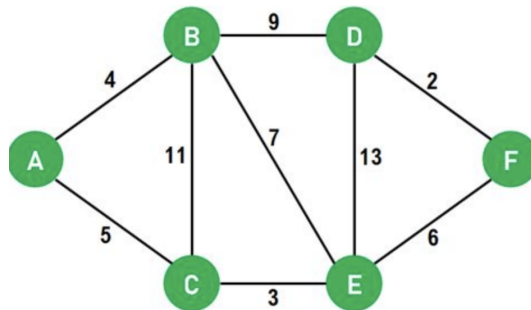




4. The universe is estimated to be 14 billion years old. How many iterations could a computer that 1 trillion iterations per second do if it started computing 14 billion years ago?

5. What is a *weighted graph*?

6. What is a *shortest path* between two vertices in a weighted graph?



7. Find a shortest path from vertex  $A$  to vertex  $F$  in this graph?

8. What is an algorithm (recipe, method) for finding a shortest path in a weighted graph?