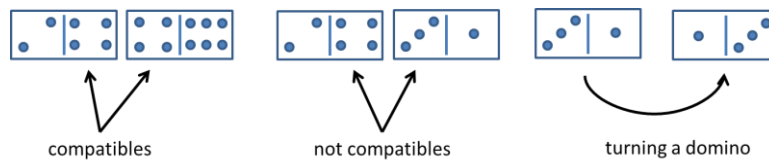
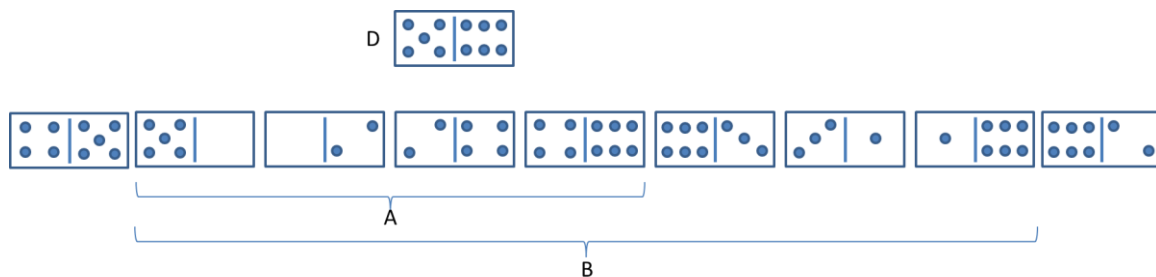


### Exercise I

A domino is a rectangular tile with a line dividing its face into two square ends. Each end is marked with a number of spots (from 0 to 6 spots). A dominoes game is a linear linked list of dominoes, having a head and a tail. Two consecutive dominoes in a game must be compatible; this means that they must have the same number of spots in their tangent ends. A domino can be turned.



1. Define the data types "Domino" and "Game".
2. Write the function "turn" that turns a domino.
3. Write the function replace that takes as parameters two integers (to form a domino) and a game, and replaces the longest possible chain in the game with the given domino. The replaced chain must be freed and the chaining must be maintained. If the operation succeed the function returns 1. If the domino cannot remplace any sub-chain, the function returns 0. Example, in the figure below, the domino D must replace the chain B and not the chain A.



### Exercise II

1. Write the function sortFile that takes as parameter the name of a file and reorganizes its contents in ascending order in terms of number of words in each line. Example, consider the following file "toto.txt":

```
I like C programming
I am alive
Go
Let us go to the movies
```

sortFile("toto.txt") will reorganize the file as follows:

```
Go
I am alive
I like C programming
Let us go to the movies
```