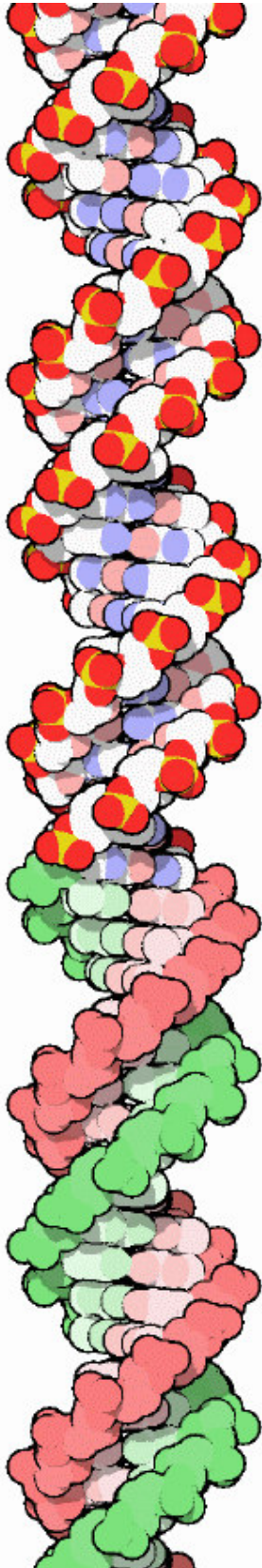


Quem é o pai?



Great scandal. A peasant woman in Almodôvar claims her son is the son of one of the players of the local football team. Unfortunately, due to the severe state of intoxication at the time of the accident, she cannot remember anymore who it was. An investigation has been started. Blood samples have been taken from all the players, as well as from the son. Helped by the latest techniques in DNA sequencing, the DNA structure of all 11 players and of the son has been determined and saved in files. You, as the expert programmer, are being called in to determine who is the father.

The total DNA sequence (20000 characters) of the son is saved in the ASCII file `X.GEN`, while only the relevant information (100 characters) of the 11 possible fathers is saved in the files

```
ABEL.GEN  
CARLOS.GEN  
JOAO.GEN  
JORGE.GEN  
JOSE.GEN  
MANUEL.GEN  
NELSON.GEN  
NUNO.GEN  
PEDRO.GEN  
RICARDO.GEN  
RUI.GEN
```

Each file is a sequence of letters C, G, T, A. The code of **one** of the players above is located in the file of the son, `X.GEN`. Which one?

Write a program that determines who is the father.

- The files can be found on the internet pages of the lecture, fx. <http://w3.ualg.pt/~pjotr/ic/index.html>
- Use PASCAL for the program. Hand in your work on a floppy 1.4 MB.
- Deadline: 2 June 2003.
- Counts for 20% of final note (together with 80% of frequency).
- Who has more than or equal to 14 has to come and talk to a docent.
- Without handing in the work, you will not be admitted to the exam.

