**Programming in CLIPS**

Use CLIPS to create a knowledge base for the family tree in Figure 1 and then ask queries about the family tree.



Figure 1: A typical family tree. Lines connect spouses and arrows point to children

1. Enter the information from this family tree as a set of Prolog facts. Note that the females are Mum, Kydd, Elizabeth, Margaret, Diana, Anne, Sarah, Zara, Beatrice, and Eugenie.
2. Add CLIPS rules that will allow you to infer information for the predicates grandChild, greatGrandparent, brother, sister, daughter, son, aunt, uncle, brotherInLaw, sisterInLaw, and firstCousin. You may create rules for additional predicates if you find that helpful.
3. Test your CLIPS program by asking it who are Elizabeth’s grandchildren, Diana’s brothers-in-law, and Zara’s great-grandparents. Note, in some cases, it may be impossible to avoid getting the same answer more than once for a query.

**Hand in:** the knowledge base (.clp file). Also screen shots of at least five different queries e.g. a) father of Harry? b) fistCousin of William? c) grandchild of George? etc. Submit those in a zip file with $ID-$NAME-CLIPS format .