1. Phenylamine is a much weaker base than a primary amine like ethylamine or than ammonia. Explain why.

2. The flow diagram below shows some reactions of phenylamine:

   ![Flow diagram]

   a) What would you add to get reaction A?
   b) What would you add to get reaction B?
   c) There are two ways to achieve reaction C. In each case, give the necessary reagent, and any important conditions.
   d) What would you react it with to get reaction D? Give any necessary conditions for the reaction.
   e) Reaction D wouldn’t just give the product shown, because several further reactions are possible. Briefly and without detail, explain why further reactions are possible.