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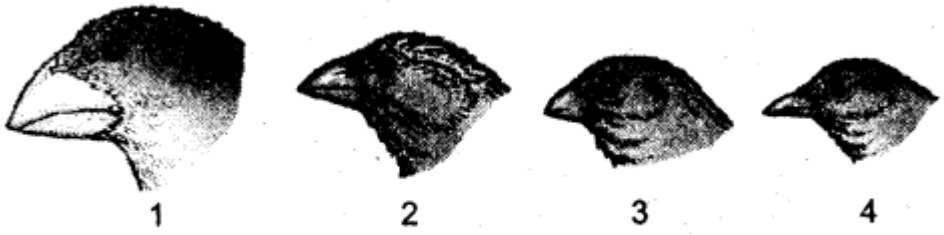
This can be explained with the help of following processes:

I. Adaptive radiation is an evolutionary process in which an ancestral stock gives rise to new species adapted to new habitats and new ways of life. Examples are (0 Darwin's finches These were small black birds, which Darwin observed in Galapagos island.

(a) He observed many varieties of finches in the same island.

(b) All varieties of finches had evolved from original seed-eating finches.

(c) There was alternation in beaks enabling some to become insectivorous and some vegetarian.



Varieties of beaks of finches that Darwin found in Galapagos island

(ii) Marsupials of Australia A number of marsupials, different from each other evolved from an ancestral stock, all within the Australian island continent.

II. Parallel evolution refers to independent development of similar characters in two animal groups of common ancestry living in similar habitats of different continents. Examples are Marsupial mammals in Australia show parallel evolution as they have evolved from placental mammals. All these closely resemble and look similar to a corresponding marsupial.

Few examples are mentioned in the table.

Parallel evolution of Australian marsupials and placental mammals

Australian marsupial	Placental mammal
Marsupial mole	Mole
Numbat (banded anteater)	Anteater
Marsupial mouse	Mouse
Spotted *Cuscus*	Lemur
Flying phalanger (sugar glider)	Flying squirrel
Tasmanian tiger cat	Bobcat
Tasmanian wolf	Wolf