1. ­­­A house factory may be used to produce a conservatory object, a back garden object or an extension object.
2. A house superclass will be created in order to se the groundwork for the inheriting subclasses. Methods will be declared in the house class, like getDimension() and setDimension(), getColour and setColour() and getPrice and setPrice().

The three sub classes: conservatory, garden and extension classes are implmenented. A HouseFactory class is then created in order to return the appropriate objects to the tester class.

1. UML Diagram:

