**Data structures used**

**userDb** – dictionary , store registered user information

**ProductDb** – dictionary , store products in Product Catalogue

**CategoryDb** – dict , store categories of products

Classes used

**Product**

Attributes – id , name , category id , price

Functions –

none

**User**

Attributes : name , role(admin/user) , password , loggedin(to keep track of logged in users) , cart

Functions:

Login() – matches password and updates loggedin flag

Logout()

ViewProductCat() – View product Catalogu DB . allowed for both user/admin

addCategory() – only admin can add new categories to category db

removeProduct() – remove product from product db . admin only.

AddProduct() – add product to product db . admin only.

updateProduct() – modify products in product db . admin only.

addToCart() – add products to cart for shopping

viewCart() – View contents of Cart

removeFromCart() – remove product or qty from the cart

checkout() – calculate total amount for the items in cart

other helper functions included to ease out devlopment