Please write the following program:

ABC company need to manage products. Design patterns offering Data Access Object (DAO) pattern:

(interface)

uses

uses

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| **Product** |
| ID: int  name: String  price: float |
| Product()  get…() and set…() |

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| **ProductDAO** |
|  |
| List<> getAllProduct()  addProduct(Product)  Product getProduct (int ID) |

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| **ProductApp** |
|  |
| static main(): void |

Implements

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| **ProductDAOImpl** |
| Products: ArrayList |
| ProductDAOImpl()  ArrayList getAllProduct ()  addProduct (Product)  Product getProduct (int ID) |

Write a program to manage products on the designs (use SQL Server to save data).

1. Add product.

2. Show products list.

3. Save all products in an object file.

4. Load file and show products list.