Name - Gojiya Ankita Kesurbhai
Enrollment - 12008101

ASSIGNMENT

1] Definition :-
   Write a program to create different types of document like WORD, PDF, TXT etc... using factory method pattern.
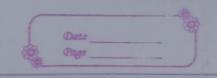
2] Classes -
   - Worddoc
   - Pdfdoc
   - Txtdoc

3] Class Diagram -

Worddoc	Pdfdoc	Txtdoc
- Create()	- Create()	- Create()
- Save()	- Save()	- Save()

4] Methods :-
- Create()
- Save()

5] Data Members :-
- Int ch;

6] Structure

Client is only aware of The interface

MyFiles (interface)
- Create()

| MyFiles. Client |

FileFactory
- getFile (name)

Factory is aware of concrete class

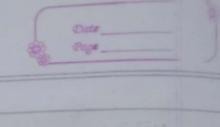| Worddoc	Pdfdoc	Txtdoc
- Create()	- Create()	- Creat()

7] Name of Participants -

- Product :- Defines the interface of objects the factory method creates (MyFiles)

- Concrete Product - implements the Product interface (Worddoc, Pdfdoc, Txtdoc)

- Concrete Creator - Returns instance of concrete product (FileFactory)

- Creator - may call factory methods to create a product object (MyFiles (Client))

8] known As -

Virtual Constructor

9] Consequences :-

- Can work with any user-defined concrete product classes.

- A class wants its subclasses to specify the object.

- A family of objects needs to be seperated by using shared interface.

- The code needs to deal with interface, not implemented classes.

- Hide concrete classes from the client.

- The returned object should be concrete object.

- It introduces weak coupling instead of tight coupling by hiding concrete classes from the application.

- It provides a simple way of extending the family of products with minor changes in application code.