**Factory**

Motivation

The Factory Design Pattern is probably the most used design pattern in modern programming languages like Java and C#. It comes in different variants and implementations.

Intent

-creates objects without exposing the instantiation logic to the client.

-refers to the newly created object through a common interface

Implementation

-The client needs a product, but instead of creating it directly using the new operator, it asks the factory object for a new product, providing the information about the type of object it needs.

-The factory instantiates a new concrete product and then returns to the client the newly created product(casted to abstract product class).

-The client uses the products as abstract products without being aware about their concrete implementation.