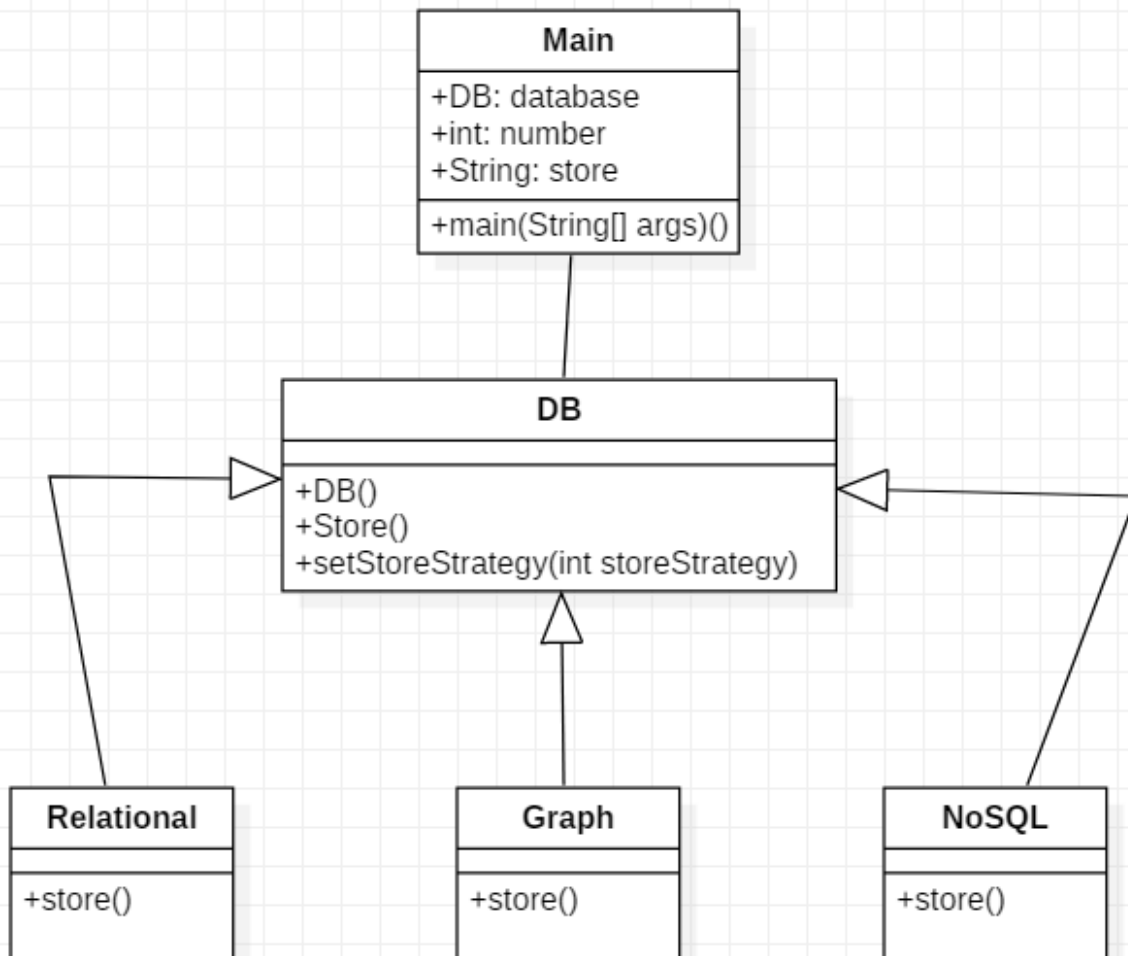# Esof 322 – Homework 2
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Part A

Part B

```java
import java.util.Scanner;

public class main {
    public static void main(String[] args) {
        DB database = new DB();
        while(true){
            System.out.println("Please Enter an option: (Integer 1-4)");
            System.out.println("1. Relational");
            System.out.println("2. NoSQL");
            System.out.println("3. Graph");
            System.out.println("4. Exit");
            Scanner input = new Scanner(System.in);
            int number = input.nextInt();

            if(number == 4){
                break;
            }else{
                DB specificDB = database.setStoreStrategy(number);
                String store = specificDB.Store();
                System.out.println(store);
            }
        }
    }
}




public class DB {
    public DB(){
    }

    public String Store(){
        return "Data was added.";
    }

    public DB setStoreStrategy(int storeStrategy){
        if(storeStrategy == 1){
            return new Relational();
        }else if(storeStrategy == 2){
            return new NoSQL();
        }else{
```

```java
        return new Graph();
    }
}
}
```

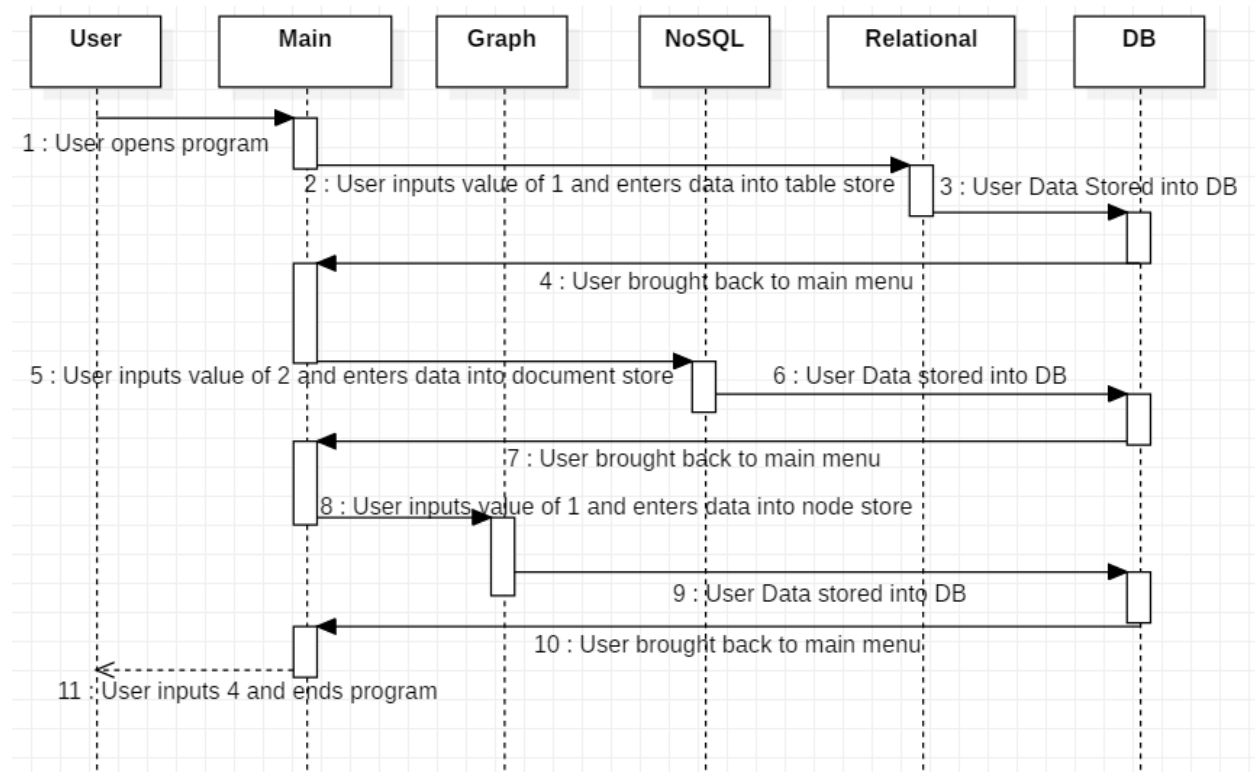```java
public class Graph extends DB {
    @Override
    public String Store()
    {
        return (super.Store()+ " Using the Graph database");
    }
}
```

```java
public class NoSQL extends DB {
    @Override
    public String Store()
    {
        return (super.Store()+ " Using the NoSQL database");
    }
}
```

```java
public class Relational extends DB{

    @Override
    public String Store()
    {
        return (super.Store()+ " Using the relational database");
    }
}
```

Part C

OUTPUT:

```
Please Enter an option: (Integer 1-4)
1. Relational
2. NoSQL
3. Graph
4. Exit
1
Data was added. Using the relational database
Please Enter an option: (Integer 1-4)
1. Relational
2. NoSQL
3. Graph
4. Exit
2
Data was added. Using the NoSQL database
Please Enter an option: (Integer 1-4)
1. Relational
2. NoSQL
3. Graph
4. Exit
3
Data was added. Using the Graph database
Please Enter an option: (Integer 1-4)
1. Relational
2. NoSQL
3. Graph
4. Exit
4
```