

United International University

CSE 1116 - Final Exam - Set A

Write your name and ID on the question paper. Marks are on the right. Return question.

Q1. Implement a GUI using Java Swing that does the following tasks: **[15 Marks]**

- a) **Components:** 2 text fields and 1 button labelled **SWAP**
- b) User can write in both the text fields
- c) When the Swap button is clicked, the text of both the fields are swapped

Fig: Before Clicking Button

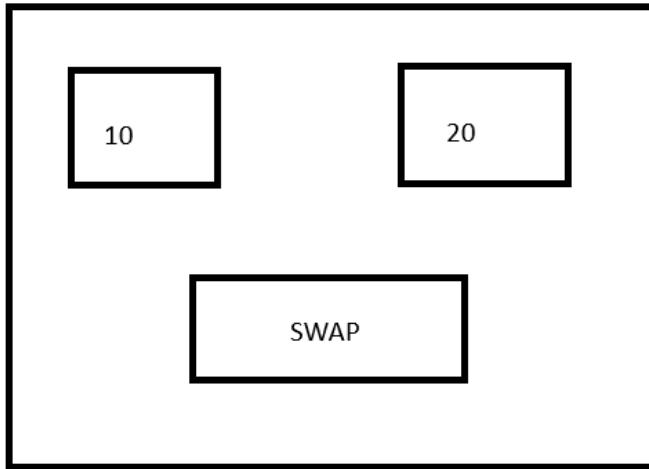
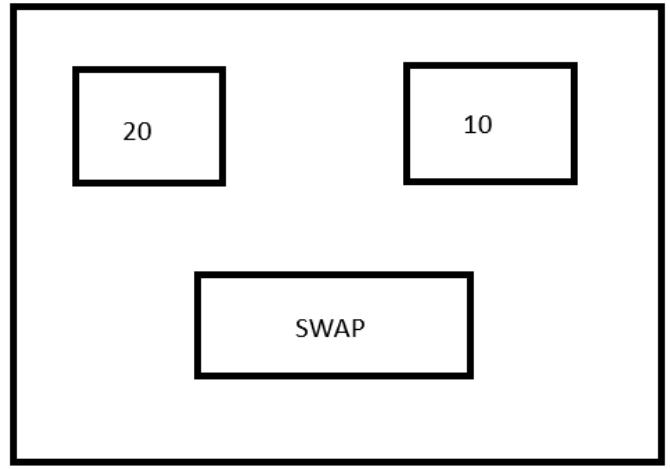


Fig: After Clicking Button



Q2. Write a **Java** code that implements the following system:

[10 Marks]

- a) **Interface Cookable** - Method void cook(String food)
- b) **Abstract Class Restaurant** that uses Cookable
 - o **Attributes**: String name, double rating
 - o **Constructor** that takes both the parameters
 - o **Implement** the cook(String food) method in the following way:
 - If the food is **Pasta** or **Pizza** or **Burger**, print a message stating that the given food is being cooked
 - If the food is not any of the 3 above, then throw an **user-defined exception** named **InvalidFoodException** with the **message: Food not available**
 - o **Abstract method** void serve(String food)
- c) **Class FastFoodRestaurant** which is a **subclass** of Restaurant
 - o **Override** the **serve** method printing a message stating that the given food is served
- d) **Class FoodProgram** which will have the **main** method
 - o Create an object of FastFoodRestaurant
 - o Call the serve() and cook() methods
 - o **Handle exceptions** for **invalid food** in cook() method, and **print** the exception messages