

CSE 1116: Object Oriented Programming Laboratory (MID QUIZ)

Time: **35 Minutes** (Including Submission on eLMS)

Total marks: 20

Write your code step by step according to the following instructions.

Create an abstract class **Chef.java**. It will contain the following elements:

- Four variables:
 - **name** -> a string
 - **age** -> an integer
 - **skill_level** -> a string ("Good"/"Average"/"Poor")
 - **salary** -> a float number indicating the salary in USD
- Two **constructor** methods:
 - Default constructor with no parameters
 - Another constructor with 4 parameters for initialization
- Two **concrete** functions:
 - **printChefInfo()** -> This function will print the four variables in the format shown below.

Print Format

Name of the chef: John, Age: 41, Skill level: Average, Salary: 102.50 USD

- **upgradeSkill()** -> If this function is called, the **skill_level** of the chef will get one level higher than the current one.

Current Skill Level	Upgraded Skill Level
Poor	Average
Average	Good
Good	Good

- One **abstract** function:
 - **cookDish()**: No definition required here

Now, create a class called **PizzaChef.java** which is a subclass of **Chef**. It will-

- define a constructor with 4 parameters. Use the **super()** method inside the constructor for initialization through the parent class.
- override **cookDish()** method. Inside the method, print this:
Chef XXXX is now cooking pizza!!!
[Here XXXX will be replaced by the chef's name].
Example: Chef Robert is now cooking pizza!!!

Finally, create a class called **TestChefs.java** which will contain the **main()** method. In the **main()**, create an instance of **PizzaChef**. Call and test all the available methods on the instance.