

United International University

Final | Summer 2022

CSE 4165/CSE 465 Web Programming | Faculty: Nahid Hossain (NHn)

Total Mark: 25 | Total Time: 2 Hours including submission

Any examinee found adopting unfair means will be expelled from the trimester / program as per UIU disciplinary rules

RETURN THE QUESTION TO THE INVIGILATOR AFTER EXAM

NAME:	ID:
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1.	<p>Design and write a javascript program with the help of html (and css if necessary) to caculate the formula given below. First, take height in centimetre(cm) and weight in pounds(lb), convert, calculate, and display results in the inner html.</p> $\text{Calculation Result} = \frac{\text{Weight in KG}}{(\text{Height in metre})^2}$ <p>Formula to convert centrimetre to metre: $\text{metre} = \frac{\text{centrimetre}}{100}$</p> <p>Formula to convert pound to KG: $\text{KG} = \frac{\text{pound}}{2.2046}$</p> <p>If the calculation result is greater than 0 and less than 20, show a status “bad”, greater than 20 to 30, show a status “not bad”, for greater than 30, show a status “not good”</p> <div style="border: 1px solid black; padding: 10px; margin: 10px auto; width: 80%; text-align: center;"> <p>Height (cm): <input style="width: 150px;" type="text" value="177.8"/></p> <p>Weight (lb): <input style="width: 150px;" type="text" value="178.574"/></p> <p><input style="background-color: #007bff; color: white; padding: 5px 20px; border: none;" type="button" value="Calculate"/></p> <p>Calculation Result: 25.85</p> <p>Status: not bad</p> </div>	10
2.	<p>Design and write the following web application using php and all other supporting languages. The web app will implement an electricity bill calculation system. The bills will vary depending on a consumer’s location, area, and quantity consumed unit. First, create an <i>electricity_bill</i> database, and then create a <i>bill_info</i> table with the following fields:</p>	15

#	Name	Type
1	id	int(11)
2	location	varchar(100)
3	area	varchar(100)
4	rate_0_75	float
5	rate_76_200	float
6	rate_201_300	float
7	rate_301_above	float

Fill the above table with the following billing/rate information:

Location	Area	Rates (Unit=BDT)
Dhaka	Urban	0-75 = 4.19 76-200 = 5.72 201-300 = 6.00 301-above = 6.56
	Rural	0-75 = 3.19 76-200 = 4.72 201-300 = 5.00 301-above = 5.56
Chittagong	Urban	0-75 = 3.50 76-200 = 4.80 201-300 = 5.23 301-above = 5.78
	Rural	0-75 = 2.50 76-200 = 3.80 201-300 = 4.23 301-above = 4.78
Sylhet	Urban	0-75 = 2.90 76-200 = 3.98 201-300 = 4.75 301-above = 4.98
	Rural	0-75 = 2.10 76-200 = 3.18 201-300 = 4.15 301-above = 4.18

Tax will be applied to the bill to calculate the final Total bill. Impose tax as follows:

Location	Tax on bill
Dhaka	20%
Chittagong	15%
Sylhet	10%

Now, create a *index.html* file and take all necessary input, such as location, area, and unit consumed, and then create a *bill.php* file to fetch necessary information from database based on inputs from index.html and calculate the total bill and show results as follows:

index.html

Location:

Area: ☒ Urban ☐ Rural

Unit Consumed:

bill.php

Your location: Dhaka

Your area: Urban

Unit consumed: 213

Total bill: 1328.70 BDT