WAD Final Term Exam (Spring 19)

Program Name	BSCS
Course Code	CSSE3143
Course Name	Web Application Development
Course Instructors	Muhammad Ali Makhdoom
Time Allowed	**180 mints**
Total marks available	100
Academic Honesty Policy	Academic dishonesty will not be tolerated. Academic dishonesty includes cheating, plagiarism (copying) or any other attempt to gain an academic advantage in a dishonest or unfair manner.

Instructions (Designing a *FBR Tax Collector* Application)

You need to develop *FBR Tax Collector Application* which can accept employee data in the given text area and filter out valid employee's list having valid information according to the given criteria and display in a table below with tax details as per <mark>tax slabs 2019-2020 budget presented by PTI government</mark>.

A zip file which contains the content of the Web Application is provided to you. This zip file contains "**index.php**" and "**data.txt**", a "css" folder with "**style.css**","**bootstrap.css**" file inside it, a "**img**" folder and a **"screenshots"** folder with the final targeted design screenshot. All your code should be added to "index.php". You **shouldn't remove, add, or move any file or folder**.

Submission

Compress all the files into a zip file and submit it to the "final-term" folder submission directory on LMS.
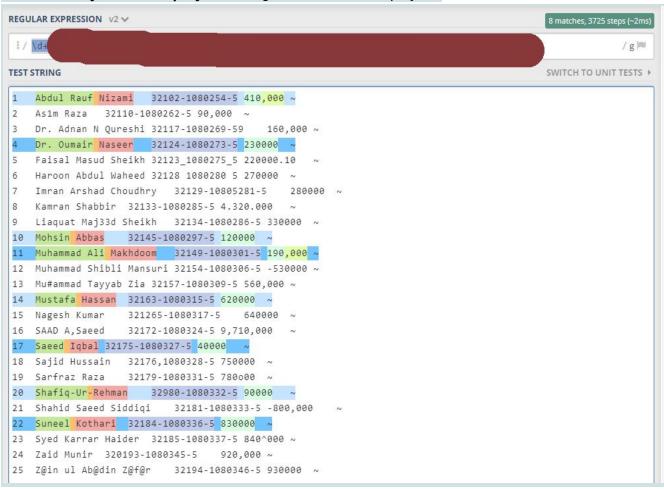
FBR Valid Employee Conditions To Apply

	Rules	Matches	Non-Matches
name	- Should contain only alphabets - Single space, dot(.) and dash(-) can come in between and space can come after dot too. - Consecutive Spaces or dashes not allowed.	- Abdul Rauf Nizami - SAMI-UR-REHMAN M. USMAN	- HAFIZA-.ANAM @@LIA TABASUM - ASRA..KHALIL - HAMMAD MUB33N
CNIC	- Only 13 digits CNIC is allowed. - Only Dash(-) after 5 and 7 digits chunks is allowed but optional.	32102-1080254-5 3214910803015	32176,1080328-5 321760_1080328_5 32176-1080328-e
Monthly Salary	- Only positive decimal numbers are allowed. - Multiple commas and single dot is allowed but optional.	160,000 2,960,000 10090.50 45000	1500.25.556 955. .65 988, -15002

Question 01

1. After copying all text from **data.txt** and pasting it in the given text-area on index.php file, you need to submit and receive that data on the server-side on the same file.   **(10)**

2. Write a regular expression to filter the employees with valid information according to the above-mentioned criteria.   **(8+8+9=25)**
   - Name
   - CNIC
   - Monthly Salary

Hint:

Paste all data from data.txt on https://regex101.com/ and write the regex

*There are **only 8 valid employees** with given data of 25 employees*

REGULAR EXPRESSION v2 ∨	8 matches, 3725 steps (~2ms)
⫶/ \d+ ▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓	/g ▶

TEST STRING   SWITCH TO UNIT TESTS ▸

```
1   Abdul Rauf Nizami   32102-1080254-5 410,000 ~
2   As1m Raza   32110-1080262-5 90,000  ~
3   Dr. Adnan N Qureshi 32117-1080269-59   160,000 ~
4   Dr. Oumair Naseer   32124-1080273-5 230000   ~
5   Faisal Masud Sheikh 32123_1080275_5 220000.10   ~
6   Haroon Abdul Waheed 32128 1080280 5 270000  ~
7   Imran Arshad Choudhry   32129-10805281-5    280000   ~
8   Kamran Shabbir  32133-1080285-5 4.320.000   ~
9   Liaquat Maj33d Sheikh   32134-1080286-5 330000  ~
10  Mohsin Abbas    32145-1080297-5 120000  ~
11  Muhammad Ali Makhdoom   32149-1080301-5 190,000 ~
12  Muhammad Shibli Mansuri 32154-1080306-5 -530000 ~
13  Mu#ammad Tayyab Zia 32157-1080309-5 560,000 ~
14  Mustafa Hassan  32163-1080315-5 620000   ~
15  Nagesh Kumar    321265-1080317-5    640000  ~
16  SAAD A,Saeed    32172-1080324-5 9,710,000   ~
17  Saeed Iqbal 32175-1080327-5 40000   ~
18  Sajid Hussain   32176,1080328-5 750000  ~
19  Sarfraz Raza    32179-1080331-5 780o00  ~
20  Shafiq-Ur-Rehman    32980-1080332-5 90000   ~
21  Shahid Saeed Siddiqi    32181-1080333-5 -800,000   ~
22  Suneel Kothari  32184-1080336-5 830000   ~
23  Syed Karrar Haider  32185-1080337-5 840^000 ~
24  Zaid Munir  320193-1080345-5    920,000 ~
25  Z@in ul Ab@din Z@f@r    32194-1080346-5 930000  ~
```

3. After writing a valid regex, use that regex in *preg_match_all($pattern, $data, $matches_out)*, extract groups of **name, cnic** and **salary** to iterate filtered employee to display them in the table dynamically using PHP **(15)**

Hint:

Review examples on https://regexone.com/references/php to check how it works

Use str_replace() to replace , - with space in salary and CNIC column respectively to just improve readability.

Name	CNIC	Monthly Salary
Abdul Rauf Nizami	32102-1080254-5	410,000/-
Dr. Oumair Naseer	32124-1080273-5	230,000/-
Mohsin Abbas	32145-1080297-5	120,000/-
Muhammad Ali Makhdoom	32149-1080301-5	190,000/-
Mustafa Hassan	32163-1080315-5	620,000/-
Saeed Iqbal	32175-1080327-5	40,000/-
Shafiq-Ur-Rehman	32980-1080332-5	90,000/-
Suneel Kothari	32184-1080336-5	830,000/-

Question 02

1. Display **Yearly Salary**, **Tax Rate**, **Monthly Tax** and **Yearly Tax** according to given *Income Tax Slabs of year 2019 - 2020* budget. **(5+8+8+9=30)**

Hint:

Use php function to calculate yearly, monthly tax

Use number_format() function to represent the price.

Verify your calculations from the website http://taxcalculator.pk/ or https://propakistani.pk/tools/tax-calculator/

	INCOME TAX SLABS FINANCIAL YEAR 2019-2020			
NO.	LOWER LIMIT	UPPER LIMIT	FIXED AMOUNT ADDITION	INCOME TAX RATE (%)
1	0	600,000	0	0.00
2	600,001	1,200,000	0	5.00
3	1,200,001	1,800,000	30,000	10.00
4	1,800,001	2,500,000	90,000	15.00
5	2,500,001	3,500,000	195,000	17.5
6	3,500,001	5,000,000	370,000	20.00
7	5,000,001	8,000,000	670,000	22.5
8	8,000,001	12,000,000	1,345,000	25.00
9	12,000,001	30,000,000	2,345,000	27.5
10	30,000,001	50,000,000	7,295,000	30.00
11	50,000,001	75,000,000	13,295,000	32.5
12	75,000,001		21,420,000	35.00

Update your table view as shown below accordingly to above given tax slabs.

Name	CNIC	Monthly Salary	Yearly Salary	Tax Rate	Monthly Tax	Yearly Tax
Abdul Rauf Nizami	32102-1080254-5	410,000/-	4,920,000/-	20%	54,500/-	654,000/-
Dr. Oumair Naseer	32124-1080273-5	230,000/-	2,760,000/-	17.5%	20,042/-	240,500/-
Mohsin Abbas	32145-1080297-5	120,000/-	1,440,000/-	10%	4,500/-	54,000/-
Muhammad Ali Makhdoom	32149-1080301-5	190,000/-	2,280,000/-	15%	13,500/-	162,000/-
Mustafa Hassan	32163-1080315-5	620,000/-	7,440,000/-	22.5%	100,750/-	1,209,000/-
Saeed Iqbal	32175-1080327-5	40,000/-	480,000/-	0%	0/-	0/-
Shafiq-Ur-Rehman	32980-1080332-5	90,000/-	1,080,000/-	5%	2,000/-	24,000/-
Suneel Kothari	32184-1080336-5	830,000/-	9,960,000/-	25%	152,917/-	1,835,000/-

2. Display **Total Monthly** and **Yearly Tax Collected** in table footer as shown. **(10)**

Valid Tax Payer Employees List

Name	CNIC	Monthly Salary	Yearly Salary	Tax Rate	Monthly Tax	Yearly Tax
Abdul Rauf Nizami	32102-1080254-5	410,000/-	4,920,000/-	20%	54,500/-	654,000/-
Dr. Oumair Naseer	32124-1080273-5	230,000/-	2,760,000/-	17.5%	20,042/-	240,500/-
Mohsin Abbas	32145-1080297-5	120,000/-	1,440,000/-	10%	4,500/-	54,000/-
Muhammad Ali Makhdoom	32149-1080301-5	190,000/-	2,280,000/-	15%	13,500/-	162,000/-
Mustafa Hassan	32163-1080315-5	620,000/-	7,440,000/-	22.5%	100,750/-	1,209,000/-
Saeed Iqbal	32175-1080327-5	40,000/-	480,000/-	0%	0/-	0/-
Shafiq-Ur-Rehman	32980-1080332-5	90,000/-	1,080,000/-	5%	2,000/-	24,000/-
Suneel Kothari	32184-1080336-5	830,000/-	9,960,000/-	25%	152,917/-	1,835,000/-
Total Tax Collected					348,208/-	4,178,500/-

3. Save and Display the Employees data pasted in text area for 3 hours after sending to the server. **(10)**

Hint:

Use cookies in php

Filter Valid Employees

Tax Collector Pakistan 2019 - 2020

```
1    Abdul Rauf Nizami  32102-1080254-5   410,000  ~
2    As1m Raza      32110-1080262-5   90,000    ~
3    Dr. Adnan N Qureshi      32117-1080269-59 160,000  ~
4    Dr. Oumair Naseer  32124-1080273-5   230000   ~
5    Faisal Masud Sheikh     32123_1080275_5  220000.10    ~
6    Haroon Abdul Waheed  32128 1080280 5   270000   ~
7    Imran Arshad Choudhry 32129-10805281-5 280000    ~
8    Kamran Shabbir     32133-1080285-5   4.320.000 ~
9    Liaquat Maj33d Sheikh   32134-1080286-5   330000   ~
10   Mohsin Abbas 32145-1080297-5   120000   ~
11   Muhammad Ali Makhdoom    32149-1080301-5   190,000  ~
12   Muhammad Shibli Mansuri    32154-1080306-5   -530000  ~
13   Mu#ammad Tayyab Zia  32157-1080309-5   560,000  ~
14   Mustafa Hassan     32163-1080315-5   620000   ~
15   Nagesh Kumar       321265-1080317-5  640000   ~
16   SAAD A,Saeed 32172-1080324-5   9,710,000 ~
```

Filter