



**Assignment 01**  
**Programming Fundamentals-CS-1104, Fall 2022**  
**BSCS-1A/BSCS-1B/BSGM-1A/BSROB-1A**

**Department of Computer Science,**  
**Faculty of Computer Science & Information Technology,**  
**The Superior University Gold Campus, Lahore.**  
**Submission Deadline: Thursday 11:59 PM, December 08, 2022**

---

Question	CLO	Domian/BT Level	Total Marks
1-10	3	C3	100

**Advice and Submission Guidelines for Assignment**

- Make sure that you read and understand each and every instruction. If you have any questions or comments you are encouraged to **discuss (only)** with your colleagues and instructor.
- In case of coding assignment, paste all codes and screenshots of output on word file, later you can convert this word file into PDF file as well. **Upload PDF file on the LMS** and keep code files with you (better in your own email) as it will be used for evaluation and viva.
- **Handwritten assignment shall be submitted in class on Friday.**
- All the submitted evaluation instruments (quizzes, assignments, lab work, exams, and the project) will be checked for plagiarism.
- **Later Submission and Plagiarism will be dealt as per university Policy**
- Start early otherwise you will struggle with the assignment.

*Note: Keep all your code files. It will be required at any time of evaluation.*

---

**Question 01:**

**(10 Points)**

Write a program that prints the numbers 1 to 4 on the same line with each pair of adjacent numbers separated by one space. Do this several ways:

- a) Using one statement with one stream insertion operator.
- b) Using one statement with four stream insertion operators.
- c) Using four statements.

**Question 02:**

**(10 Points)**

Write a program that generates the following table:

1990	135
1991	7290
1992	11300
1993	16200

Use a single cout statement for all output.

**Question 03:****(10 Points)**

On a certain day the **British pound** was equivalent to **\$1.487 U.S.**, the **French franc** was **\$0.172**, the **German deutschemark** was **\$0.584**, and the **Japanese yen** was **\$0.00955**. 1Write a program that allows the user to enter an amount in **British pound**, and then displays this value converted to these four other monetary units.

**Question 04:****(10 Points)**

You can convert temperature from degrees **Celsius** to **degrees Fahrenheit** by multiplying by **9/5** and **adding 32**. Write a program that allows the user to enter a floating-point number representing degrees Celsius, and then displays the corresponding degrees Fahrenheit.

**Question 05:****(10 Points)****Miles per Gallon**

Write a program that calculates a **car's gas mileage**. The program should ask the user to enter the number of gallons of gas the car can hold, and the number of miles it can be driven on a full tank. It should then **display the number of miles that may be driven per gallon of gas**.

**Question 06:****(10 Points)****Stadium Seating**

There are three seating categories at a stadium. For a softball game, **Class A** seats **cost \$15**, **Class B** seats **cost \$12**, and **Class C** seats **cost \$9**. Write a program that asks how many tickets for each class of seats were sold, then displays the amount of income generated from ticket sales.

**Question 07:****(10 Points)****Average Rainfall**

Write a program that calculates the **average rainfall** for three months. The program should ask the user to enter the name of each month, such as June or July, and the amount of rain (in inches) that fell each month. The program should display a message similar to the following:  
**The average rainfall for June, July, and August is 6.72 inches.**

**Question 08:****(10 Points)****How Many Calories?**

A **bag of cookies** holds **40 cookies**. The calorie information on the bag claims that there are **10 "servings"** in the bag and that **a serving equals 300 calories**. Write a program that asks the user to input how many cookies he or she actually ate and then reports how many total calories were consumed.

**Question 09:****(10 Points)****Automobile Costs**

Write a program that asks the user to enter the **monthly costs** for the following expenses incurred from operating his or her automobile: **loan payment, insurance, gas, oil, tires, and maintenance**. The program should then display the **total monthly cost** of these expenses, and the **total annual cost** of these expenses

**Question 10:****(10 Points)**

Write a program to print the following poem by using suitable escape sequences.

A time has come  
and it is now.  
Will you take a stand  
or bend your knee and bow?

Will you state your case?  
Will you run this race  
or turn in disgrace,  
try to hide your face?

You've spoken the word,  
and by many were heard.  
Now what will you do  
when it's left up to you?

Will you act out your faith  
in the midst of a trial?  
Will you do what is right?  
Will you put up a fight?

Be a blessing to others;  
help your sisters and brothers.  
Care for those in need.  
Help multiply their seed.

Be gracious and faithful.  
Be fair and be true,  
looking not unto others.  
Let the change come through you...