Lab Tasks:

1. Write a program that finds the second highest number in a float type array of 20 elements using pointer.

2. Write a program that calculates the sum of all the elements in array using pointers

3. Write a program in C++ to calculate and print the Electricity bill of a given customer. The customer id, name and unit consumed by the user should be taken from the keyboard and display the total amount to pay to the customer. The charges are as follow:

Unit	Charge/Unit
Up to 199	@16.20
200 and above but less than 300	@20.10
300 and above but less than 500	@27.10
500 and above	@35.90

If bill exceeds Rs. 18000 then a surcharge of 15% will be charged on top of the bill.
Test Input:
1001 //Customer ID
James //Customer Name
800 //Units Consumed
Expected Output:
Customer ID :1001
Customer Name: James
Units Consumed :800
Amount Charges @Rs. 35.90 per unit: 28720
Surcharge Amount: 4308
Net Amount Paid by the Customer: 33028.00

4. Write a program that prompts the user to enter the weight of a person in kilograms and outputs the equivalent weight in pounds. Output both the weights rounded to two decimal places. (Note that 1 kilogram = 2.2 pounds.) Format your output with two decimal places.

5. A movie in a local theater is in great demand. To help a local charity, the theater owner has decided to donate to the charity a portion of the gross amount generated from the movie. This example designs and implements a program that prompts the user to input the movie name, adult ticket price, child ticket price, number of adult tickets sold, number of child tickets sold, and percentage of the gross amount to be donated to the charity. The output of the program is as follows.

```
-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*
Movie Name: ................................... Journey to Mars
Number of Tickets Sold: .......................... 2650
Gross Amount: ........................................ $ 9150.00
Percentage of Gross Amount Donated: 10.00%
Amount Donated: ................................... $ 915.00
Net Sale: ................................................. $ 8235.00
```

Note that the strings, such as "Movie Name:" , in the first column are left-justified, the numbers in the right column are right-justified, and the decimal numbers are output with two decimal places.

Input: The input to the program consists of the movie name, adult ticket price, child ticket price, number of adult tickets sold, number of child tickets sold, and percentage of the gross amount to be donated to the charity.

Output: The output is as shown above.

6. Write a program that reads a student name followed by five test scores. The program should output the student's name, the five test scores, and the average test score. Output the average test score with two decimal places.

Input:
Andrew Miller 87.50 89 65.75 37 98.50

Output:
Student name: Andrew Miller
Test scores: 87.50 89.00 65.75 37.00 98.50
Average test score: 75.55