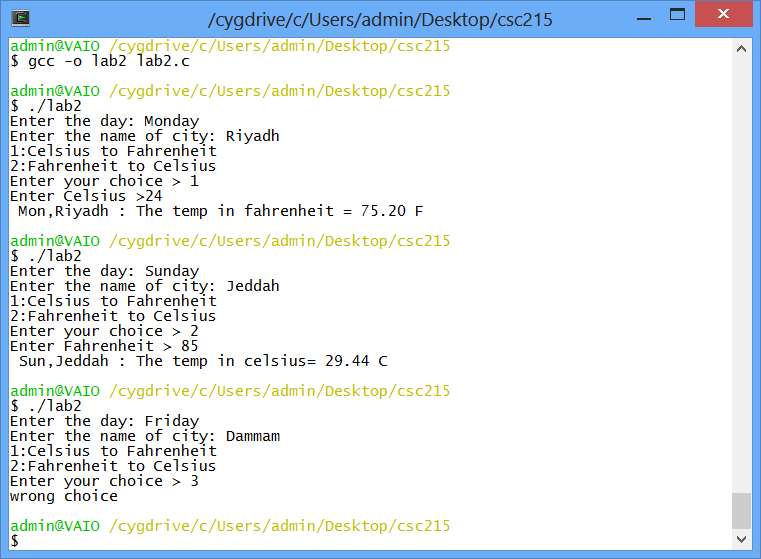
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| **KING SAUD UNIVERSITY**  **COLLEGE OF COMPUTER AND INFORMATION SCIENCES**  **COMPUTER SCIENCE DEPARTMENT** | | |
| **CSC215** | **Lab2**  **C Basics** | **2nd Semester 1436-1437** |

Write a complete c program that converts temperatures either from Fahrenheit to Celsius or from Celsius to Fahrenheit for given city according to the user’s choice. Your program should read the name of city , day and temperature, then display the temperature as the following format: the first 3 characters of the day , city and converted temperature as shown in sample run.

**Note**: Formula to convert from Celsius to Fahrenheit: [°F] = 9/5 [°C] + 32. If the choice entered by the user is not 1 or 2 , the program should display “Wrong choice “message. Use the string functions for concatenate the name city and day in one string separated by ‘,’

**Sample run:**



Name your file using the following naming convention:

* “Lab2\_YourFirstName\_YourLastName.c"
* Don’t forget to move to your own directory
* Compile your code and execute it.
* Show the program to your lab instructor before you leave.

**Answer:**

#include <stdio.h>

#include <string.h>

int main() {

float cel, fah;

int choice;

char city[20];

char day[20];

char str[50]; // for combining day and city

printf("Enter the day: ");

scanf("%s", day);

printf("Enter the name of city: ");

scanf("%s", city);

printf("1:Celsius to Fahrenheit\n");

printf("2:Fahrenheit to Celsius\n");

printf("Enter your choice > ");

scanf("%d", &choice);

strncpy(str, day, 3);

str[3] = '\0';

strcat(str, ",");

strcat(str, city);

if (choice == 1)

{

printf("Enter Celsius >");

scanf(" %f", &cel);

fah = 9.0 / 5 \* cel + 32;

printf(" %s : The temp in fahrenheit = %.2f F\n", str, fah);

}

else if (choice == 2)

{

printf("Enter Fahrenheit > ");

scanf("%f", &fah);

cel = 5.0 / 9 \* (fah - 32);

printf(" %s : The temp in celsius= %.2f C\n", str, cel);

}

else

printf("wrong choice\n");

return 0;

}