

KING SAUD UNIVERSITY COLLEGE OF COMPUTER AND INFORMATION SCIENCES COMPUTER SCIENCE DEPARTMENT		
CSC215	Lab # 5 Pointers	2 nd Semester 1436-1437

Q1) Write program that contains the following functions:

- A function called **reverse_string**. It will take a string as a parameter. Then it will reverse its content.

Example: "Hello" → "olleH"

The function signature should look like this:

- `void reverse_string(char *str)`

- A function called **isPalindrome**. It will take a string as a parameter. The function should return 1 if the string is a palindrome. False otherwise. A palindrome is a word that reads the same forward or reversed.

Example: "mom" → 1

"hello" → 0

"Dad" → 0

The methods signature should look like this:

- `int isPalindrome(char *str)`

- In The main function should do the following:

Print the input string in to reverse order. Tell the user if they were palindrome or not.

Sample run:

```
$ ./isPalendorme
Input a string
mom
reverse string is : "mom"
"mom" is a palindrome string.

admin@VAIO /cygdrive/c/Users/admin/Desktop/csc215
$ ./isPalendorme
Input a string
Dad
reverse string is : "daD"
"daD" is not a palindrome string.
```

Name your file using the following naming convention:

- "Lab5Q1_YourFirstName_YourLastName.c"
- Don't forget to move to your own directory
- Compile your code and execute it.

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- Show the program to your lab instructor before you leave.

Q2) Write a Program that computes the average of students grades stored in an array using pointers.

Sample Run

```

Enter the number of students:5
Enter the grade of Student# 1:88
Enter the grade of Student# 2:98
Enter the grade of Student# 3:100
Enter the grade of Student# 4:90
Enter the grade of Student# 5:70
The average of array elements : 89.00

```

Name your file using the following naming convention:

- "Lab5Q2_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.