الجة آيت

A man should look for what is, and not for what he thinks should be. Albert Einstein

## Homework 04

## [If, Nested If]

## See Next Homework for further practice, coming soon....

Note1: Output is made clear by showing boxes so that spaces can be counted.
Note2: Don't do hard coding in task use formulas and functions to generalize your programs.
Note3: In task 7 output on right hand side is of two different runs of the program

## Task 1:

Write a program to input number from user (1-5). Print respective English word like One, Two, Three, Four and Five. Show error message if output is out of range?

## Task 2:

Write a program to input full name from user. Check if user has given space or not to separate first and last name. If user has not given space show error message?

## Task 3:

Write a program to generate 3 random numbers $n 1, n 2$ and $n 3$ in range 1 to 10 . If any of them comes same show them otherwise show message all numbers are different?

## Task 4:

Write a program to generate 2 random numbers $n 1$ and $n 2$ in range 1 to 5 . Display $n$ and check if both are equal, show message "Same number generated again, Let me try again." generate n2 again and check if same number generated again, show message "Sorry same number again." otherwise show second number?

Next tasks are from deck of cards, if students are luckily unaware of detail of cards used in card games. Read detail of cards, otherwise move to next task:
A pack of cards called deck has 52 cards of 4 types. Each type has 13 cards, 4 types given below. Cards have two colors Red or Black see details below. Each type of card is numbered from 2-10. Where remaining 4 cards has symbols instead of number that is 11 is Jack, 12 is Queen, 13 is King and A for Ace:

| Symbol | Type | Color | Symbol | Representation |
| :---: | :---: | :---: | :---: | :---: |
| D | Diamonds | Red | A | Ace |
| H | Hearts | Red | 2... 10 | Card values |
|  |  | Red | J | Jack |
| S | Spades | Black | Q | Queen |
| C | Clubs | Black | K | King |

## Task 5:

Write a program to input card type (String) and print color of the card?

Task 6:
Write a program to generate a card randomly out of deck. Idea is generate a number 1 to 13 both included. Generate another number say type 0 to 4 ( 4 not included). Now using checks print card like:
Four of Club
Six of Diamond
Ace of Spade
King of Diamond

## Task 7:

Extend previous task to generate two cards. Check and show appropriate messages if:

- both cards have same number
- both cards have same type
- both cards have same color
- cards are in sequence

