



Aror University of Art, Architecture, Design & Heritage Sukkur.

Department of Artificial Intelligence and Multimedia Gaming

Programming for AI (Spring-2025)

LAB#02

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Objective of Lab No. 2:

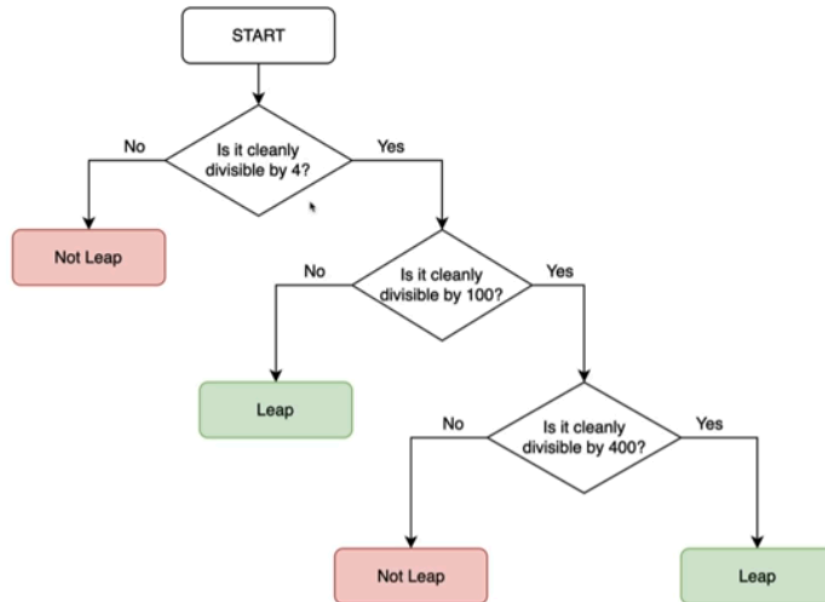
After performing lab2, students will be able to:

- Use if-else statement
- Use if-elif statement
- Use nested if statement
- Work with for loops
- Work with Lists
- Use range() function
- Work with Random Module

Task#01: Determine whether an year is a leap year or not, Code using Nested if conditional, the Flow chart for the said problem is given below:



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Task#02: Write a program using conditional statements, which may prompt the user about size of the pizza, Small Pizza is \$15, Medium Pizza is \$20, Large Pizza is \$25, Ask the user if they want peperoni topping, for small pizza its \$2, for medium \$2.5, and for large \$3.5, Ask extra cheese, for small it is \$1, \$2 for medium and \$2.5 for large, calculate the total price

Task#03 Love score calculator:

For Love scores between 40 to 50, the message should be:

“Your score is y, you should be alright to gether”

Otherwise, their message should be:

“Your score is y.”

Eg.

name1=Kanye West

name2=Kim Kardashian

T one time occurs

R one time occurs

U zero time



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E two times occur

4

L zero time

O zero time

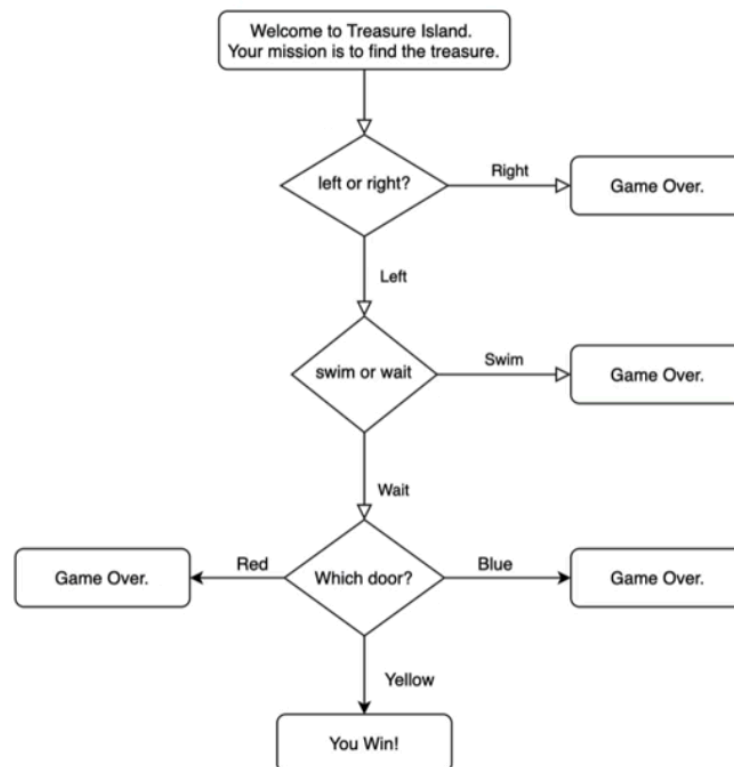
V zero time

E Two Times

Your love score is 42, you should be alright together

42

Task#04 Solve the given problem using Conditionals, In the game the goal of the user is to find the Treasure Box:





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Task#05: Use a for loop to sum all the even numbers from 1-1000, Don't use conditional statements

Task#06 You are going to write a program that prints the solution to the FizzBuzz game. These are the rules of the FizzBuzz game:

- Your program should print all numbers from 1-100, including hundred
- When Number is divisible by 3 it should print Fizz instead of printing the number
- When the Number is divisible by 5 it should print Buzz instead of printing the number
- When the Number is divisible by both 3 and 5 it should print FizzBuzz instead of printing the number

```
1
2
Fizz
4
Buzz
Fizz
7
8
Fizz
Buzz
11
Fizz
13
14
FizzBuzz
...etc
```

Task#07 Password Generator App:

Write down the code which asks user the following questions and then generates a random password:



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```
Welcome to the PyPassword Generator!  
How many letters would you like in your password?  
14  
How many symbols would you like?  
3  
How many numbers would you like?  
4  
Here is your password: 4FW*K8x4%Y8VwKfZMxkuC
```