**Lab Experiment #01**

**QUESTIONS:**

**Q # 1: What is the difference between a “workgroup” and “domain” in context of Microsoft windows?**

**Ans**. In Microsoft Window, a workgroup is for smaller networks where computer directly share resources. A domain is for larger networks with centralized management and authentication.

**Q # 2: What is OCR and how it is useful?**

**Ans**. OPT stands for Optical Character Recognition, it is a technology that allows computers to recognize and extract text from image or scanned documents. It is useful because it enables the conversion of physical documents into editable and searchable digital format, making it easier process, search analyze large amount of text-based information.

**Q # 3Gather some data about the CPU speeds (Hz) from 1972 onwards. Could you comment on why CPU speeds trend have started to flatten** **after 2005?**

**Ans**. In 1972, CPU speeds have generally increased over time due to advancement in technology. However, after 2005 the trend of increasing CPU speeds started to flatten because of various factors such as power consumption, heat dissipation and physical limitation of semiconductor technology.

**Q # 4: Did you notice that the drive letters in your computer start with the letter c? What happened to the drive letter a and b?**

**Ans.** The drive letter A and B were traditionally floppy disk drives. However, as technology advanced floppy disk become less common and other storage have floppy drives, so the drive letter A and B are typically not used. Instead, the letter C is commonly assigned to the main hard disk drive.

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**Lab Experiment #02**

**QUESTION NO # 1**

**Part (1):**

a = 1.0

b = “1”

c = ”1.1”

result = a+float(b)

print(result)

**Output:**

2.0

[Process complete – press Enter]

**Part (2):**

a = 1.0

b = “1”

c = ”1.1”

result = float(b)+float(c)

print(result)

**Output:**

2.1

[Process complete – press Enter]

**Part (3):**

a = 1.0

b = “1”

c = ”1.1”

result = a + int(c)

print(result)

**Output:**

Float and Int can’t together

[Process complete – press Enter]

**Part (4):**

a = 1.0

b = “1”

c = ”1.1”

result = a + int(float(c))

print(result)

**Output:**

2.0

[Process complete – press Enter]

**Part (5):**

a = 1.0

b = “1”

c = ”1.1”

result = int(a) + int(float(c))

print(result)

**Output:**

2

[Process complete – press Enter]

**Part (6):**

a = 1.0

b = “1”

c = ”1.1”

result = 2.0 \* b

print(result)

**Output:**

Float and Int can’t together

[Process complete – press Enter]

**Ans**.

1. 2.0

2. 2.1

3. Float and Int can’t together

4. 2.0

5. 2

6. Float and Int can’t together

**QUESTION # 02**

**Part (1):**

a, b= ‘red’, ‘blue’

a, b=b, a

print (a, b)

**Output:**

a, b = blue red

[Process complete – press Enter]

**Part (2):**

a=”10”

result=(a+a)

print (“result=”, result)

**Output:**

result=1010

[Process complete – press Enter]

**Str = ‘Hello World!’**

**Part (1):**

print (str)

**Output:**

Hello World!

[Process complete – press Enter]

**Part (2):**

print (str [0])

**Output:**

H

[Process complete – press Enter]

**Part (3):**

print (str [2:5])

**Output:**

Llo

[Process complete – press Enter]

**Part (4):**

print (str [2:])

**Output:**

llo World!

[Process complete – press Enter]

**Part (5):**

print (str \* 2)

**Output:**

Hello World! Hello World!

[Process complete – press Enter]

**Part (6):**

print (str + “Test”)

**Output:**

Hello World! Test

[Process complete – press Enter]

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