

#### Hands-On Prerequisite Python in AI

### Exercises 01 & 02

Deadline: 2023 18 April

**Score:** 700



#### Hands-On Prerequisite Python in AI

### Exercises 01

**Score: 450** 

# Question 1 (Basics)

For each of the following variables, first show the type of the variable, then change it to the requested type and show the type again.

#### **Points:**

```
✓ Use type()
```

#### • Change to float and integer:

```
num1 = 12.6
num2 = "050"
num3 = "20."
student_num = "s98234"
flag = True
```

#### • Change to boolean:

# Question 2 (Basics)

Display average of the following three variables in the output.

```
num1 = 20

num2 = 19.
```

num3 = "18.5"

# Question 3 (Basics)

Define two variables with integer values, then display True if the first variable is greater than the second and display False if it is smaller.

#### **Points:**

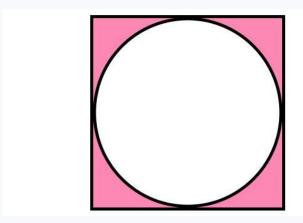
✓ Without use <u>if</u>

# Question 4 (Basics)

By getting the length and width of a rectangle, calculate and display its perimeter and area.

# Question 5 (Basics)

In the figure below, calculate the area of the colored part by getting the radius of the circle.



# Question 6 (Basics)

In the following three lines, display the value of num1, num2, num3.

#### **Points:**

• If you have an error, explain the reason and fix the error.

```
num1 = num2 = num3 = 200
num1 , num2 , num3 = 10, 20, 145
num1 , num2 , num3 = 30, 100
```



#### Hands-On Prerequisite Python in AI

### Exercises 02

Deadline: 2023 18 April
Score: 250

# Question 1 (Conditions)

Get a number from input and display its absolute value.

# Question 2 (Conditions)

Get three numbers from the user and display the number that is between the other two numbers in the output.

# Question 3 (Conditions)

Define a username and password. Then get username and password from the user, if match the defined information, display a welcome message, and if the information is wrong, display one of the following messages.

If the username was wrong: "The username entered is wrong"
If the password was wrong: "The entered password is wrong"
If the username and password were wrong: "the entered information is wrong"

#### **Thanks**

**Good Luck!**