Qn.1

The fundamental components of a python program include Functions, Variables, Statements or expressions and datatypes.

The Python Virtual Machine which is the python interpreter converts the code into machine executable code and in this the interpreter reads and executes the given file line by line.

Qn.2

Mutable datatypes are datatypes where elements can be modified. These include lists, dictionaries, sets.

While

Immutable datatype are datatypes where elements cannot be modified. These include tuples, strings, integers.

Qn.3

In cases where there is more than one operator in an expression, operator precedence guides the order in which these operations carry out. For example, multiplication has higher precedence than subtraction

Qn.4

Qn.5

input\_number\_of\_guests = input('Number of guests: ')

input\_number\_of\_slices = input('Number of slices: ')

#converting input to integer

number\_of\_guests = int(input\_number\_of\_guests)

number\_of\_slices = int(input\_number\_of\_slices)

#Calculating the total number of pizzas

total\_slices = number\_of\_guests \* number\_of\_slices

total\_number\_of\_pizzas = total\_slices / 8

# rounded number of pizzas

rounded\_number\_of\_pizzas = round(total\_number\_of\_pizzas)

# total number of pizzas

print('Total number of pizzas:', rounded\_number\_of\_pizzas)