**What is variable?**

Variables in Programming languages are used to store values. Values can be input from the user or result of any operations.

Variable is a container to store values.  They are reference to a memory location which is used to store value. They are also called Identifiers.

**Q2. What is Snake Case VS Camel Case?**

Snake case separates each word with an underscore character (\_).

When using snake case, all letters need to be lowercase.

Here are some examples of how you would use the snake case:

number\_of\_donuts = 34

fave\_phrase = "Hello World"

Snake case is used for creating variable and method names.

Snake case is also a good choice for naming files, as it keeps names readable.

You will typically encounter it the most when programming in Python and not so much when programming in Java, JavaScript, or TypeScript.

You will also come across it when working with databases, as it is used for creating table and column names.

There is also an all-caps version of the snake case where all letters are in the upper case - also known as the screaming snake case.

Here are some examples of how you would use upper case snake case:

NUMBER\_OF\_DONUTS = 34

FAVE\_PHRASE = "Hello World"

The capitalized version is used for declaring constants in most programming languages. A constant is a data item whose value doesn't change throughout the life of a program.

### Camel Case:

When using camel case, you start by making the first word lowercase. Then, you capitalize the first letter of each word that follows.

So, a capital letter appears at the start of the second word and at each new subsequent word that follows it.

Here are some examples of how you would use camel case:

numberOfDonuts = 34

favePhrase = "Hello World"

In the example numberOfDonuts, the first word number is lowercase. Then, the first letter of the second word, Of, is capitalized, as is the first letter of the third word, Donuts.

You will encounter camel case in Java, JavaScript, and TypeScript for creating variable, function, and method names.

**3. What is meant by integer division.**

In Python, we can perform **floor division** (also sometimes known as **integer division**) using the // operator. This operator will divide the first argument by the second and round the result down to the nearest whole number, making it equivalent to the math.floor() function.

**Q.4Write program to exchange the values of two numbers with and without using temporary variables.**

a=10

b=20

print("Before Swapping: ")

print("a=" ,a)

print("b=" ,b)

a=a+b #30 10

b=a-b #30 10

a=a-b #20 10

print("After Swapping: ")

print("a=" ,a)

print("b=" ,b)

**OUTPUT:**

**Before Swapping:**

**a= 10**

**b= 20**

**After Swapping:**

**a= 20**

**b= 10**

**5. Write a program to accept a string value via user input and display the same .**

name=input("Enter Your Name:=> ")

print("Entered Name is:=> ",name)

**OUTPUT:**

**Enter Your Name:=> Ankita**

**Enter Marks for Maths:=> 30**

**6. Write a program to find the average marks for three subjects.**

maths=int(input("Enter Marks for Maths:=> "))

english=int(input("Enter Marks for English:=> "))

science=int(input("Enter Marks for Science:=> "))

total=(maths+science+english)

avg=total/3

print("Total Marks Of 3 Subjects:=> ",total)

print("Average Marks Of 3 Subjects:=> ",avg)

OUTPUT:  
Enter Marks for Maths:=> 78

Enter Marks for English:=> 65

Enter Marks for Science:=> 56

Total Marks Of 3 Subjects:=> 199

Average Marks Of 3 Subjects:=> 66.33333333333333