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In [1]: 1 # Question: Print your name
        2 print('My name is Innomatics')
```

My name is Innomatics

```
In [2]: 1 # Question: What is a variable? Write a Few words about Variables. Create aV
        2 # Answer
        3 # Variable is a temporary name given to the memory location
```

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In [3]: 1 # Variables should start with alphabets or underscore
        2 # Variables should not start with numbers and special characters
        3 # Variables can be a mixture of alphabets and numbers
        4 # Variables are case-sensitive
```

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In [4]: 1 # Examples
        2 a=23
        3 b=35
        4 a+b
```

Out[4]: 58

```
In [5]: 1 A+b # variable is case sensitive
```

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NameError                                Traceback (most recent call last)
<ipython-input-5-cb966cc189c6> in <module>
----> 1 A+b # variable is case sensitive

NameError: name 'A' is not defined
```

```
In [6]: 1 a_123=55      # mixture of alphabets and numbers
        2 b_123=65
        3 a_123+b_123
```

Out[6]: 120

```
In [7]: 1 #Question:Assume that we execute the following assignment statements:width=
        2 # For each of the following expressions, write thevalue of the expression an
        3 # 1. width/2  2. width/2.0  3. height/3  4. 1 + 2 * 5  5. delimiter *
        4 # Answer
        5 width=17
        6 height=float(12.0)
        7 delimiter=str('.')
        8 result="1. width/2 = {} 2. width/2.0 = {} 3. height/3 = {} 4. 1+2*5 = {} 5.d
        9 result.format(width/2,width/2.0,height/3,1+2*5,delimiter*5)
```

Out[7]: '1. width/2 = 8.5 2. width/2.0 = 8.5 3. height/3 = 4.0 4. 1+2*5 = 11 5.delimite
r*5 ='

```
In [8]: 1 width=17
        2 height=float(12.0)
        3 delimiter=str('.')
        4 values="{}/2 = {}\n{}/2.0 = {}\n{}/3 = {}\n1+2*5 = {}\n{*}5 = {}"
        5 print(values.format(width,width/2,width,width/2.0,height,height/3,1+2*5,deli
```

```
17/2 = 8.5
17/2.0 = 8.5
12.0/3 = 4.0
1+2*5 = 11
.*5 = .....
```

```
In [9]: 1 # Question: Add two number by taking variable names as first and second
        2 a=int(input("first number is:"))
        3 b=int(input("second number is:"))
        4 print("Addition of two numbers are :",a+b)
```

```
first number is:100
second number is:200
Addition of two numbers are : 300
```

```
In [10]: 1 # Question: Add your first name and second name
        2 a=input("My first name is :")
        3 b=input("My second name is :")
        4 print("My full name is : ",a+b)
```

```
My first name is :Sachin
My second name is :Tendulkar
My full name is : SachinTendulkar
```

```
In [11]: 1 # Question: print the datatypes of the following 10, '10', True, 10.5
        2 type(10)
```

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Out[11]: int
```

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In [12]: 1 type('10')
```

```
Out[12]: str
```

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In [13]: 1 type(True)
```

```
Out[13]: bool
```

```
In [14]: 1 type(10.5)
```

```
Out[14]: float
```

```
In [15]: 1 # Question: num_int = 123      num_str = "456"   Add num_int and num_str
        2 num_int=123
        3 num_str=int('456')
        4 print("Addition of 123 and 456 is :",num_int+num_str)
```

```
Addition of 123 and 456 is : 579
```

```
In [16]: 1 # Question: The volume of a sphere with radius r is  $\frac{4}{3}\pi r^3$  . What is the vol
2 r=float(input("The Radius of the Sphere is:"))
3 pi=float(22/7)
4 volume=float(4/3*pi*r**3)
5 print("The Volume of the Spere is : ",volume)
```

The Radius of the Sphere is:5

The Volume of the Spere is : 523.8095238095237

```
In [17]: 1 # Question: Suppose the cover price of a book is Rs.24.95, but bookstores get
2 # Shipping costs Rs.3 for the first copy and 75 paise for each additional cop
3 # What is the total wholesale cost for 60 copies?
4 book_cost=24.95
5 discount=0.6
6 shipping_cost_first=3
7 shipping_cost_remaining=0.75
8 total_books=60
9 cost_of_books=book_cost*discount*total_books
10 shipping_cost=shipping_cost_first+(shipping_cost_remaining*59)
11 total_cost=cost_of_books+shipping_cost
12 print("The Total cost of all books is : ",total_cost)
```

The Total cost of all books is : 945.4499999999999

In []:

```
1
```