

programs-var-datatypes

November 5, 2024

1 Q.91 Variables in Python

```
[8]: # Q.91. Create a variable named age and print age
age = 25
print(age)
#or using text in print statements
print("Age is:",age)
```

```
25
Age is: 25
```

2 Q.92 Declaring a variable

```
[ ]: #Q.92. Using print command to display the value declared to variable
number = 20
print(number)
print(-1)
```

```
20
-1
```

3 Q.93. Properties of variables/Rules while naming a variable

```
[23]: #Q.93 Question incomplete, but lets see some examples of how the python
      ↪ identifiers can be named and cannot be.
1num = 1
# Cannot name variable starting with number
```

```
Cell In[23], line 2
    1num = 1
    ^
SyntaxError: invalid decimal literal
```

```
[25]: num$ = 3
      #Cannot using special characters while naming a variable
```

```
Cell In[25], line 1
    num$ = 3
      ^
SyntaxError: invalid syntax
```

```
[27]: if = "abc"
      # Cannot use python keywords to name a variable
```

```
Cell In[27], line 1
    if = "abc"
      ^
SyntaxError: invalid syntax
```

```
[29]: Chef = "abc"
      print(chef)
      #Variable names are case sensitive, Chef != chef here
      # we declared variable using upper case 'C' and we are printing using lower
      ↪case 'c'
```

```
-----
NameError                                Traceback (most recent call last)
Cell In[29], line 2
      1 Chef = "Abc"
----> 2 print(chef)

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

```
[31]: # Only 1 special character underscore(_) is allowed.
      a_test = 10
      print(a_test)
```

10

```
[33]: #Same case letters to be used
      chef = "abc"
      print(chef)
```

abc

```
[36]: #Variable name has no length limit  
xxxxxxx = "xyz"  
print(xxxxxx)
```

xyz

4 Q.94 Addition of variables

```
[84]: #Q.94. Addition of variables  
a = 23  
b = 20  
sum = a + b  
print(sum)  
#or can print using the text  
print("The sum of",a,"and",b,"is:",a+b)
```

43

The sum of 23 and 20 is: 43

5 Q.95. Area of Rectangle

```
[94]: #Q.95. To find and print the Area of Rectangle  
length = 45  
width = 76  
area = length * width  
print(area)  
#or can print using the text  
print("The Area of Rectangle is:",area)
```

3420

The Area of Rectangle is: 3420

6 Q.96 Using Float Datatype

```
[92]: #Q.96. To find the area of a circle using float values  
radius = 8.9  
pi = 3.14  
area = pi * radius * radius  
print(area)
```

248.71940000000004

7 Q.97 Using String Datatype

```
[106]: #Q.97. Assigning two string values (using "" double quotes and '' single quotes ↵  
        ↵) and Printing two string values in the same line  
a = 'Learning'  
b = "is fun!"  
print(a,b)
```

Learning is fun!

```
[ ]:
```