

Write all the conventions being followed while declaring a variable.

Ans:-- a variable name must start with a letter like(a to z) or with a underscore(\_)..If we start with any other it will show error.. example is given below

```
In [1]: a = 10
        b = "PW skills"
        _ = 10
```

```
In [2]: a+_
```

```
Out[2]: 20
```

```
In [3]: 1a=10
        2b=4 #example of wrong varriable declearation
```

```
Cell In[3], line 1
    1a=10
      ^
SyntaxError: invalid decimal literal
```

```
In [5]: 1a+2b #example of wrong varriable declearation
```

```
Cell In[5], line 1
    1a+2b
      ^
SyntaxError: invalid decimal literal
```

Q2.What will happen if we declare a restricted keyword as a variable?

It will show error if we use while as a variable it will show syntax error example:-

```
In [6]: if=4
        while =5
```

```
Cell In[6], line 1
    if=4
      ^
SyntaxError: invalid syntax
```

```
In [8]: if+while
```

```
Cell In[8], line 1
    if+while
      ^
SyntaxError: invalid syntax
```

Q3.Can we actually declare a string as a variable name?

ans:- Yes we can but we cant use a space in the string

```
In [14]: #example  
Pw_Skill =50  
Apna_College =50
```

```
In [15]: Pw_Skill+Apna_College
```

```
Out[15]: 100
```

```
In [16]: #wrong Syntax  
pw skill=20
```

```
Cell In[16], line 2  
    pw skill=20  
      ^  
SyntaxError: invalid syntax
```

```
In [17]: pw skill #it will not work
```

```
Cell In[17], line 1  
    pw skill  
      ^  
SyntaxError: invalid syntax
```

Q4. Is it possible for us to declare "\_" as a variable? If so, then write an example of it.

Yes it is possible example given below

```
In [19]: _101 =10  
        _102 = 20
```

```
In [20]: _101 + _102
```

```
Out[20]: 30
```

Q5. Using an example, explain how the variables in python are dynamic in nature.

Ans:- suppose we declare the value of a=10 after some time i declare the value of a=20 then the inbuilt function of the python will reassign the value of a 20 and delete the old value from the memory through gurbage calling function example is given below

```
In [21]: #example  
  
a=10
```

```
In [22]: b=20
```

```
In [23]: a+b
```

```
Out[23]: 30
```

```
In [24]: a
```

Out[24]: 10

In [26]: *#now change the value of a*  
*a=30 #reassigned the value of a*

In [27]: a+b

Out[27]: 50

In [28]: a

Out[28]: 30

In [ ]: