Variables:

- One of the most powerful features of a programming language is the ability to manipulate *variables*.
- A variable is a name that refers to a value.
- It is the memory location to stored values.
- Variable assignment using '=' operator.

A variable is a type of **identifier**.
Rules for naming identifiers:

- The first character of the identifier must be a letter of the alphabet (uppercase ASCII or lowercase ASCII or Unicode character) or an underscore (_).
- The rest of the identifier name can consist of letters (uppercase ASCII or lowercase ASCII or Unicode character), underscores (_) or digits (0-9).
- Identifier names are case-sensitive. For example, myname and myName are not the same. Note the lowercase n in the former and the uppercase N in the latter.

Examples of valid identifier names are i, name_2_3.
Examples of invalid identifier names are 2things, this is spaced out, my-name and >a1b2_c3.
Python reserves 33 keywords:

```
del       from
elif      global
else      if
except    import
False     in
None      True
nonlocal  try
not       while
or        with
pass      yield
and
as
assert
break
class
continue  finally   is        raise
def       for       lambda    return
```

Major data types:

- Numbers
- String
- Complex
- List
- Tuple
- Dictionary

```
z=20 #number

x="this is a string" #string

y=[1,2,3,4] #list

p={15,6,7} #tuple

r={a:5} #dictionary
```

There are three numeric data types:

1. int (integers)
2. float (floating point real values)
3. complex (complex numbers)

```
a=10 # int
b= 12.6 # float
c= 5j # complex
```