



2.8. Variable Names and Keywords

Variable names can be arbitrarily long. They can contain both letters and digits, but they have to begin with a letter or an underscore. Although it is legal to use uppercase letters, by convention we don't. If you do, remember that case matters. `Bruce` and `bruce` are different variables.

Caution

Variable names can never contain spaces.

The underscore character (`_`) can also appear in a name. It is often used in names with multiple words, such as `my_name` or `price_of_tea_in_china`. There are some situations in which names beginning with an underscore have special meaning, so a safe rule for beginners is to start all names with a letter.

If you give a variable an illegal name, you get a syntax error. In the example below, each of the variable names is illegal.

```
76trombones = "big parade"
more$ = 1000000
class = "Computer Science 101"
```

`76trombones` is illegal because it does not begin with a letter. `more$` is illegal because it contains an illegal character, the dollar sign. But what's wrong with `class`?

It turns out that `class` is one of the Python **keywords**. Keywords define the language's syntax rules and structure, and they cannot be used as variable names. Python has thirty-something keywords (and every now and again improvements to Python introduce or eliminate one or two):

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

You might want to keep this list handy. If the interpreter complains about one of your variable names and you don't know why, see if it is on this list.

Check your understanding

data-8-1: True or False: the following is a legal variable name in Python: `A_good_grade_is_A+`

- ☐ A. True
☒ B. False

Check me

Compare me

✓ - The `+` character is not allowed in variable names (everything else in this name is fine).

Activity: 1 -- Multiple Choice (question2_8_1)

You have attempted 2 of 1 activities on this page

✓ Completed. Well Done!

2.7. Variables">

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2.9. Choosing the Right Variable Name">

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