

Python: I/O

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- **raw_input()** reads strings
- **input()** evaluates and casts input appropriately

We type '42':

```
a = raw_input() # a is the string '42'  
b = input()     # b is 42
```

- **str()** casts to 'human-readable' string
- **repr()** casts to 'computer-readable' string
- **print** implicitly uses **str()**

String representation

```
print 1.0/7.0           #'0.142857142857'  
print str(1.0/7.0)    #'0.142857142857'  
print repr(1.0/7.0)  #'0.14285714285714285'
```

Reading files

```
# reading at once  
with open(filename, "r") as file:  
    content = file.read()
```

```
# reading per line  
with open(filename, "r") as file:  
    for line in file:  
        print line
```

```
# reading into sequence of lines  
with open(filename, "r") as file:  
    lines = file.readlines()
```

Writing into files

```
# creating new file  
with open(filename, "w") as file:  
    file.write("my_output")
```

```
# appending to existing file  
with open(filename, "a") as file:  
    file.write("my_logoutput")
```

- **r** for reading, **w** for writing, **a** for appending
- add a **+** for read-and-write mode
- add a **b** for binary mode