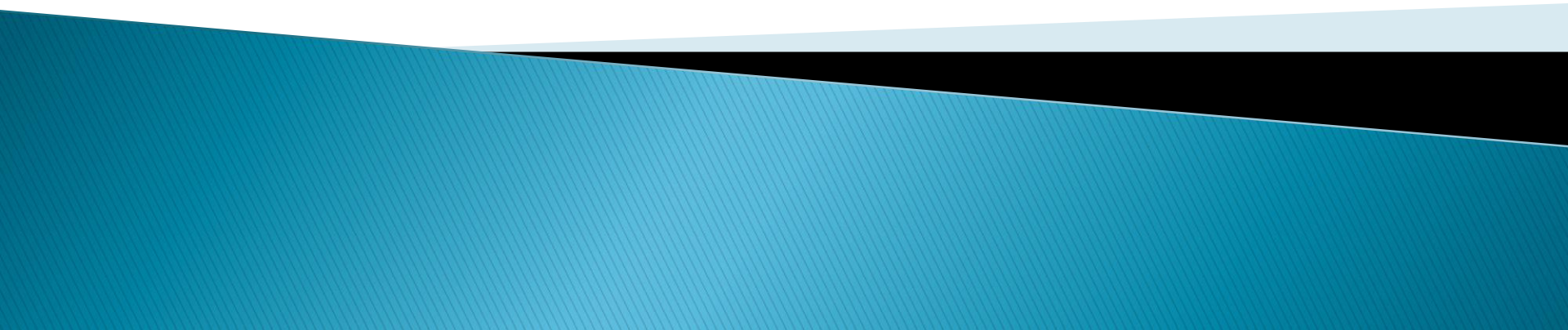
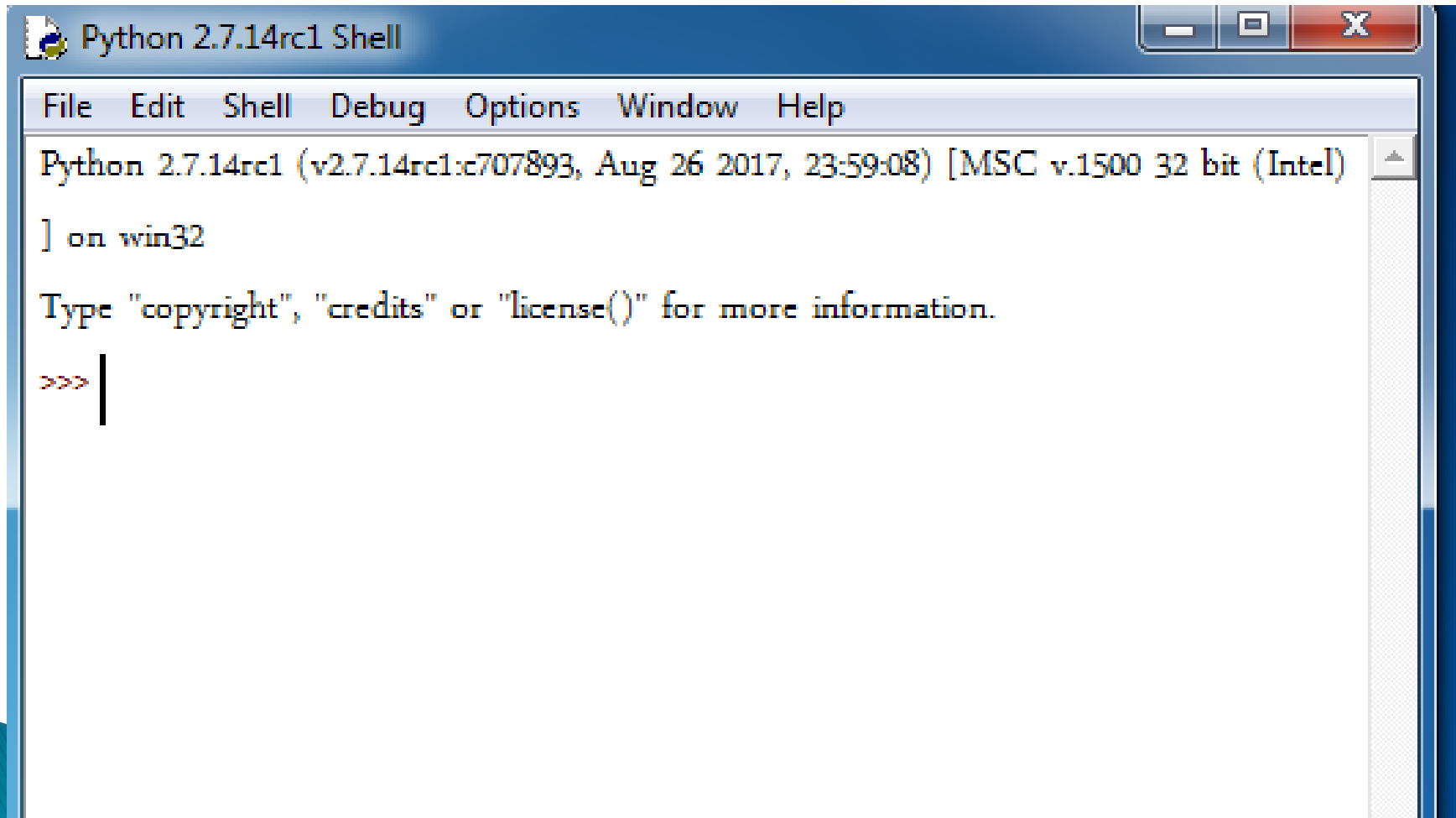


INTRODUCTION

1. **Modes**
 2. **Values & Types**
 3. **Number Systems**
 4. **Simple programs**
- 

Interactive Mode

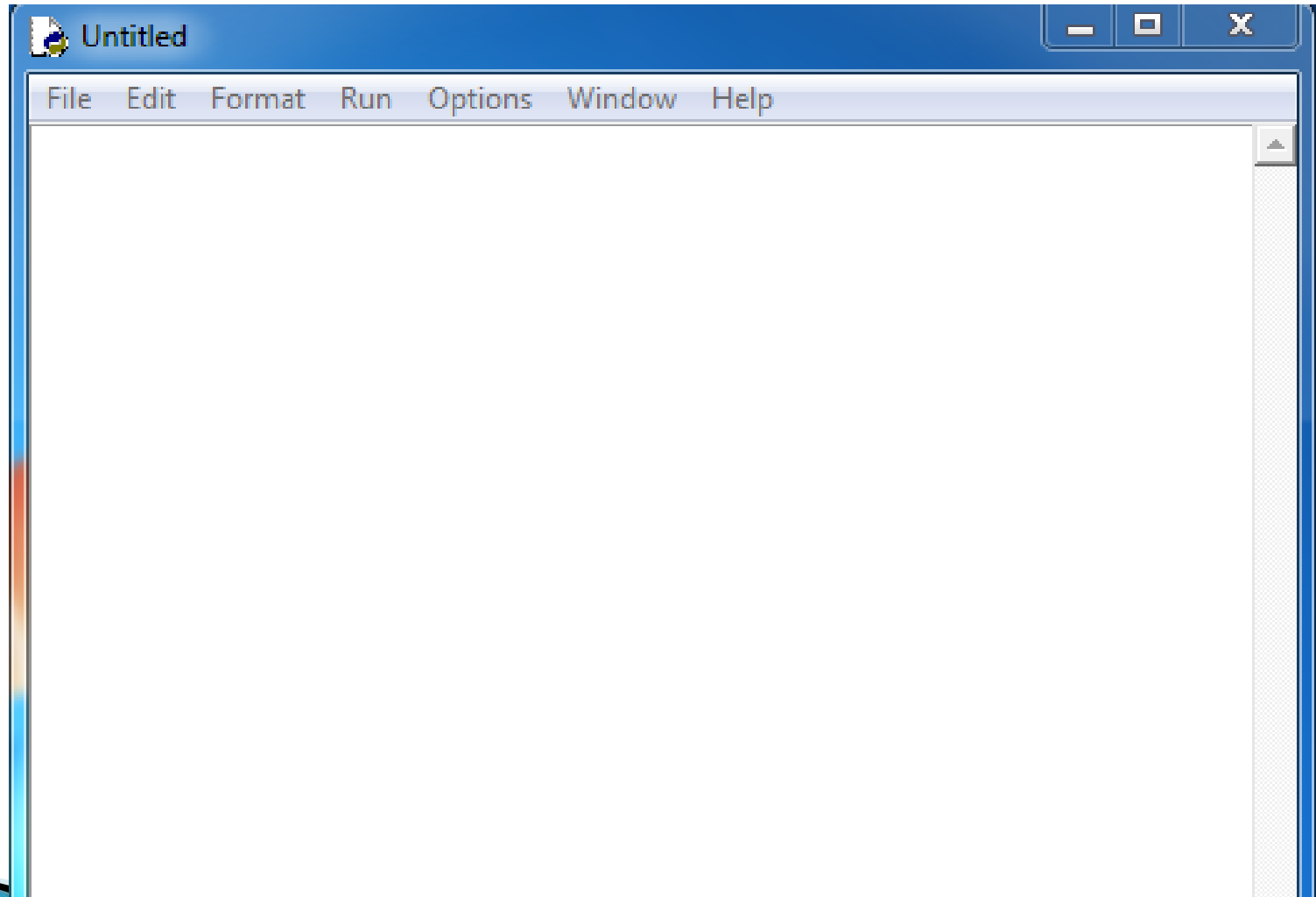


The image shows a screenshot of a Windows-style application window titled "Python 2.7.14rc1 Shell". The window has a blue title bar with standard minimize, maximize, and close buttons. Below the title bar is a menu bar with the following items: "File", "Edit", "Shell", "Debug", "Options", "Window", and "Help". The main content area of the window displays the following text:

```
Python 2.7.14rc1 (v2.7.14rc1:c707893, Aug 26 2017, 23:59:08) [MSC v.1500 32 bit (Intel)] on win32
Type "copyright", "credits" or "license()" for more information.
>>> |
```

The text is displayed in a monospaced font. The prompt ">>>" is followed by a vertical cursor bar, indicating that the shell is ready to accept input.

Script Mode



Values & Types

- ▶ Value: one of the basic parts of a program
 - Letter
 - Number
- ▶ Type: specifies the type of a value
 1. Numeric
 - Integer : 12, -12, 1000, 1235.268
 - Float : 1.25, -10.50, 100.59
 - Complex : 12+5j , 12-8j
 2. String : 'a' "a" "app" 'app' ""app""
 3. None : empty value

INTERACTIVE MODE

- ▶ To know the type of a value

Syntax:

`type(value)`

Example:

```
>>> type(12)
<type 'int'>
```

Do Yourself:

```
type(12.569)
type('hai')
type("Apple")
type(-125689)
type(None)
type(22+7j)
```

Type Conversions

- ▶ To change the type of one value into another type
- ▶ **Functions:**
 - `int()` `float()` `str()` `complex()`

Syntax:

`int(value)`

Example

```
>>> int('12')  
12
```

Do Yourself:

```
int("12")  
int("str")  
float(12)  
str(12)  
str(12.88)  
complex(12)  
complex(12.88)  
complex("12+9j")
```

Number System

- ▶ Binary oB101 , ob101
- ▶ Octal 0o12 , 0O12
- ▶ Hexadecimal 0xa, 0Xa, 0xf

To convert Decimal into other

Syntax:

hex(decimal value)

oct (decimal value)

bin(decimal value)

Example

```
>>> hex(16)
```

```
'0x10'
```

To convert other Number system into Decimal

Syntax:

print(binary value)

print(Octal value)

print(Hexa value)

Example:

```
>>> print(0Xf)
```

```
15
```

Do Yourself:

```
hex(20)
```

```
bin(1111)
```

```
oct(8)
```

```
print(0XA)
```

```
print(0O8)
```

```
print(0b1100)
```


Input Function

- ▶ Used to get value from the user

Syntax:

```
Input(prompt message)
```

Example:

```
A=Input("enter a value")  
print(A)
```