

Normal positive Input with less than 16 digits and minor number MSD  
Decimal: 127.0  
Exponent: 5

[illegible][illegible]

Exponent: 5

[illegible]

Normal negative input containing coefficient decimals with no major, 1 major,  
and 2 major decimal numbers  
Decimal: -7123123468789789.0  
Exponent: 15

Decimal-64 Floating Point Converter

Enter Decimal Value:

Enter Base-10 Exponent:

Select Rounding Method:

Output:

```
Decimal Input: -7123123468789789.0
Exponent Input: 15
Rounding Method: Truncate

--Results--
Sign: 1
Combination Field: 01111
Exponent Continuation: 10011101
Coefficient Continuation:
0010100011001010001110011010001111001111111001111
```

Decimal-64 Floating Point Converter

Enter Decimal Value:

Enter Base-10 Exponent:

Select Rounding Method:

Output:

```
Rounding Method: Truncate

--Results--
Sign: 1
Combination Field: 01111
Exponent Continuation: 10011101
Coefficient Continuation:
0010100011001010001110011010001111001111111001111

Hexadecimal Result: BE74A328E68F3FCF
```

Floor and Positive

Decimal: 12345678901234567890

Exponent: 15

Decimal-64 Floating Point Converter

Enter Decimal Value:

Enter Base-10 Exponent:

Select Rounding Method:

Output:

```
Decimal Input: 12345678901234567890
Exponent Input: 15
Rounding Method: Floor

--Results--
Sign: 0
Combination Field: 01001
Exponent Continuation: 10011101
Coefficient Continuation:
01001101001011100111000001111000101000111001010110
```

Decimal-64 Floating Point Converter

Enter Decimal Value:

Enter Base-10 Exponent:

Select Rounding Method:

Output:

```
Rounding Method: Floor

--Results--
Sign: 0
Combination Field: 01001
Exponent Continuation: 10011101
Coefficient Continuation:
01001101001011100111000001111000101000111001010110

Hexadecimal Result: 267534B9C1E28E56
```

### Floor and Negative

Decimal: -12345678901234567890

Exponent: 15

Decimal-64 Floating Point Converter

Enter Decimal Value:

Enter Base-10 Exponent:

Select Rounding Method:

Output:

```
Decimal Input: -12345678901234567890
Exponent Input: 15
Rounding Method: Floor

--Results--
Sign: 1
Combination Field: 01001
Exponent Continuation: 10011101
Coefficient Continuation:
01001101001011100111000001111000101000111001010111
```

Decimal-64 Floating Point Converter

Enter Decimal Value:

Enter Base-10 Exponent:

Select Rounding Method:

Output:

```
Rounding Method: Floor

--Results--
Sign: 1
Combination Field: 01001
Exponent Continuation: 10011101
Coefficient Continuation:
01001101001011100111000001111000101000111001010111

Hexadecimal Result: A67534B9C1E28E57
```

Ceiling and Positive  
Decimal: 12345678901234567890  
Exponent: 15

Decimal-64 Floating Point Converter

Enter Decimal Value:

Enter Base-10 Exponent:

Select Rounding Method:

Output:

```
Decimal Input: 12345678901234567890
Exponent Input: 15
Rounding Method: Ceiling

--Results--
Sign: 0
Combination Field: 01001
Exponent Continuation: 10011101
Coefficient Continuation:
01001101001011100111000001111000101000111001010111
```

Decimal-64 Floating Point Converter

Enter Decimal Value:

Enter Base-10 Exponent:

Select Rounding Method:

Output:

```
Rounding Method: Ceiling

--Results--
Sign: 0
Combination Field: 01001
Exponent Continuation: 10011101
Coefficient Continuation:
01001101001011100111000001111000101000111001010111

Hexadecimal Result: 267534B9C1E28E57
```

### Ceiling and Negative

Decimal: -12345678901234567890

Exponent: 15

Decimal-64 Floating Point Converter

Enter Decimal Value:

Enter Base-10 Exponent:

Select Rounding Method:

Output:

```
Decimal Input: -12345678901234567890
Exponent Input: 15
Rounding Method: Ceiling

--Results--
Sign: 1
Combination Field: 01001
Exponent Continuation: 10011101
Coefficient Continuation:
01001101001011100111000001111000101000111001010110
```

Decimal-64 Floating Point Converter

Enter Decimal Value:

Enter Base-10 Exponent:

Select Rounding Method:

Output:

```
Rounding Method: Ceiling

--Results--
Sign: 1
Combination Field: 01001
Exponent Continuation: 10011101
Coefficient Continuation:
01001101001011100111000001111000101000111001010110

Hexadecimal Result: A67534B9C1E28E56
```

RTN and greater than half  
Decimal: 123456789012345255  
Exponent: 15

Decimal-64 Floating Point Converter

Enter Decimal Value:

Enter Base-10 Exponent:

Select Rounding Method:

Output:

```
Decimal Input: 123456789012345255
Exponent Input: 15
Rounding Method: RTN

--Results--
Sign: 0
Combination Field: 01001
Exponent Continuation: 10011101
Coefficient Continuation:
01001101001011100111000001111000101000111001010011
```

Decimal-64 Floating Point Converter

Enter Decimal Value:

Enter Base-10 Exponent:

Select Rounding Method:

Output:

```
Rounding Method: RTN

--Results--
Sign: 0
Combination Field: 01001
Exponent Continuation: 10011101
Coefficient Continuation:
01001101001011100111000001111000101000111001010011

Hexadecimal Result: 267534B9C1E28E53
```



RTN and equal to half with even last digit  
Decimal: 123456789012345250  
Exponent: 15

Decimal-64 Floating Point Converter

Enter Decimal Value: 123456789012345250

Enter Base-10 Exponent: 15

Select Rounding Method: RTN

Convert

Output:

```
Decimal Input: 123456789012345250
Exponent Input: 15
Rounding Method: RTN

--Results--
Sign: 0
Combination Field: 01001
Exponent Continuation: 10011101
Coefficient Continuation:
01001101001011100111000001111000101000111001010010
```

Save to File

Decimal-64 Floating Point Converter

Enter Decimal Value: 123456789012345250

Enter Base-10 Exponent: 15

Select Rounding Method: RTN

Convert

Output:

```
Rounding Method: RTN

--Results--
Sign: 0
Combination Field: 01001
Exponent Continuation: 10011101
Coefficient Continuation:
01001101001011100111000001111000101000111001010010

Hexadecimal Result: 267534B9C1E28E52
```

Save to File

RTN and equal to half with odd last digit  
Decimal: 123456789012345350  
Exponent: 15

Decimal-64 Floating Point Converter

Enter Decimal Value:

Enter Base-10 Exponent:

Select Rounding Method:

Convert

Output:

```
Decimal Input: 123456789012345350
Exponent Input: 15
Rounding Method: RTN

--Results--
Sign: 0
Combination Field: 01001
Exponent Continuation: 10011101
Coefficient Continuation:
010011010010111100111000001111000101000111001010100
```

Save to File

Decimal-64 Floating Point Converter

Enter Decimal Value:

Enter Base-10 Exponent:

Select Rounding Method:

Convert

Output:

```
Rounding Method: RTN

--Results--
Sign: 0
Combination Field: 01001
Exponent Continuation: 10011101
Coefficient Continuation:
010011010010111100111000001111000101000111001010100

Hexadecimal Result: 267534B9C1E28E54
```

Save to File

RTN and less than half  
Decimal: 123456789012345245  
Exponent: 15

Decimal-64 Floating Point Converter

Enter Decimal Value: 123456789012345245

Enter Base-10 Exponent: 15

Select Rounding Method: RTN

Convert

Output:

```
Decimal Input: 123456789012345245
Exponent Input: 15
Rounding Method: RTN

--Results--
Sign: 0
Combination Field: 01001
Exponent Continuation: 10011101
Coefficient Continuation:
01001101001011100111000001111000101000111001010010
```

Save to File

Decimal-64 Floating Point Converter

Enter Decimal Value: 123456789012345245

Enter Base-10 Exponent: 15

Select Rounding Method: RTN

Convert

Output:

```
Rounding Method: RTN

--Results--
Sign: 0
Combination Field: 01001
Exponent Continuation: 10011101
Coefficient Continuation:
01001101001011100111000001111000101000111001010010

Hexadecimal Result: 267534B9C1E28E52
```

Save to File

Truncate  
Decimal: 12345678901234567890  
Exponent: 15

Decimal-64 Floating Point Converter

Enter Decimal Value:

Enter Base-10 Exponent:

Select Rounding Method: Truncate ▼

Output:

```
Decimal Input: 12345678901234567890
Exponent Input: 15
Rounding Method: Truncate

--Results--
Sign: 0
Combination Field: 01001
Exponent Continuation: 10011101
Coefficient Continuation:
01001101001011100111000001111000101000111001010110
```

Decimal-64 Floating Point Converter

Enter Decimal Value:

Enter Base-10 Exponent:

Select Rounding Method: Truncate ▼

Output:

```
Rounding Method: Truncate

--Results--
Sign: 0
Combination Field: 01001
Exponent Continuation: 10011101
Coefficient Continuation:
01001101001011100111000001111000101000111001010110

Hexadecimal Result: 267534B9C1E28E56
```

Positive Infinity  
Decimal: 1237.0  
Exponent: 370

---

Decimal-64 Floating Point Converter

Enter Decimal Value:

Enter Base-10 Exponent:

Select Rounding Method:

Output:

```
Decimal Input: 1237.0
Exponent Input: 370
Rounding Method: Truncate

--Results--
Positive Infinity

Binary Result: 0 1111 1111100 000000000000000000000000
0000000000000000000000000000000000000000000000000000000
Hexadecimal Result: 7FF0000000000000
```

Negative Infinity  
Decimal: -1237.0  
Exponent: 370

---

Decimal-64 Floating Point Converter

Enter Decimal Value:

Enter Base-10 Exponent:

Select Rounding Method:

Output:

```
Decimal Input: -1237.0
Exponent Input: 370
Rounding Method: Truncate

--Results--
Negative Infinity

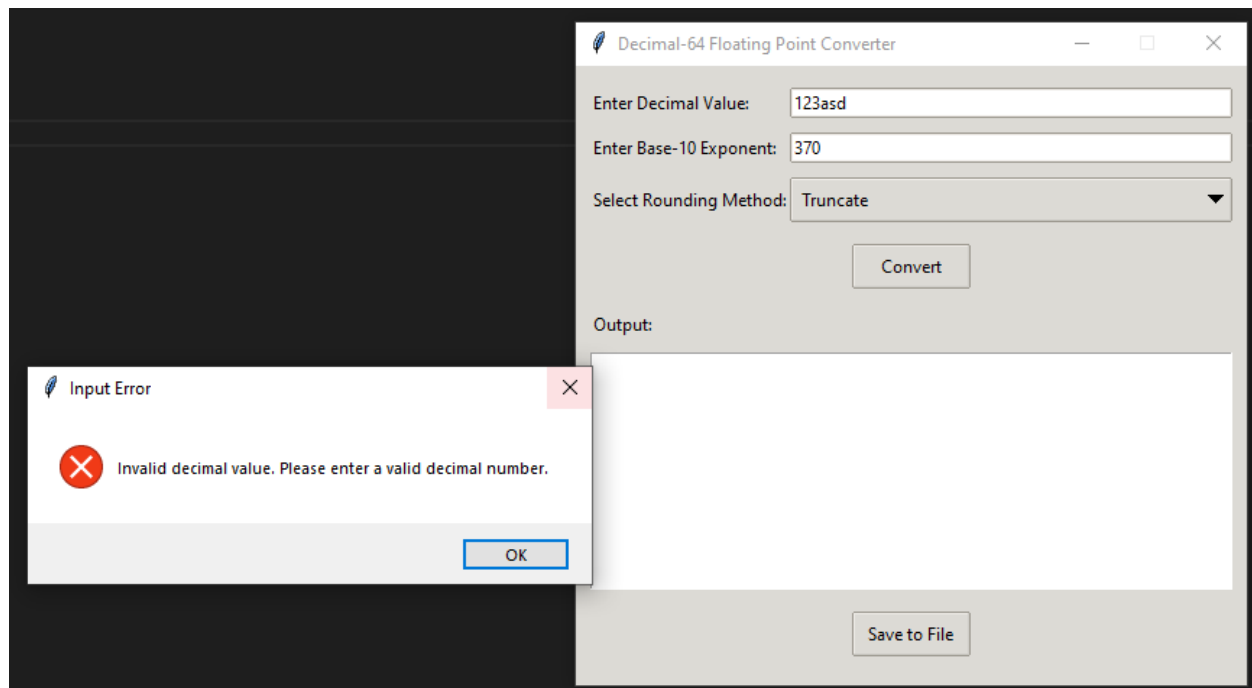
Binary Result: 1 11111 11111100 000000000000000000000000
000000000000000000000000
Hexadecimal Result: FFF0000000000000
```

NaN  
Decimal: 0  
Exponent: 370

The screenshot shows a software application titled "Decimal-64 Floating Point Converter". It has three input fields at the top: "Enter Decimal Value:" containing "0", "Enter Base-10 Exponent:" containing "370", and "Select Rounding Method:" set to "Truncate". A "Convert" button is located below these inputs. The "Output:" section contains a monospaced text area showing the following information:  
`Decimal Input: 0`  
`Exponent Input: 370`  
`Rounding Method: Truncate`  
  
`--Results--`  
`NaN`  
  
`Binary Result: 0 11111 11111110 000000000000000000000000`  
`000`  
`Hexadecimal Result: 7FF8000000000000`  
A "Save to File" button is positioned at the bottom right of the output area.

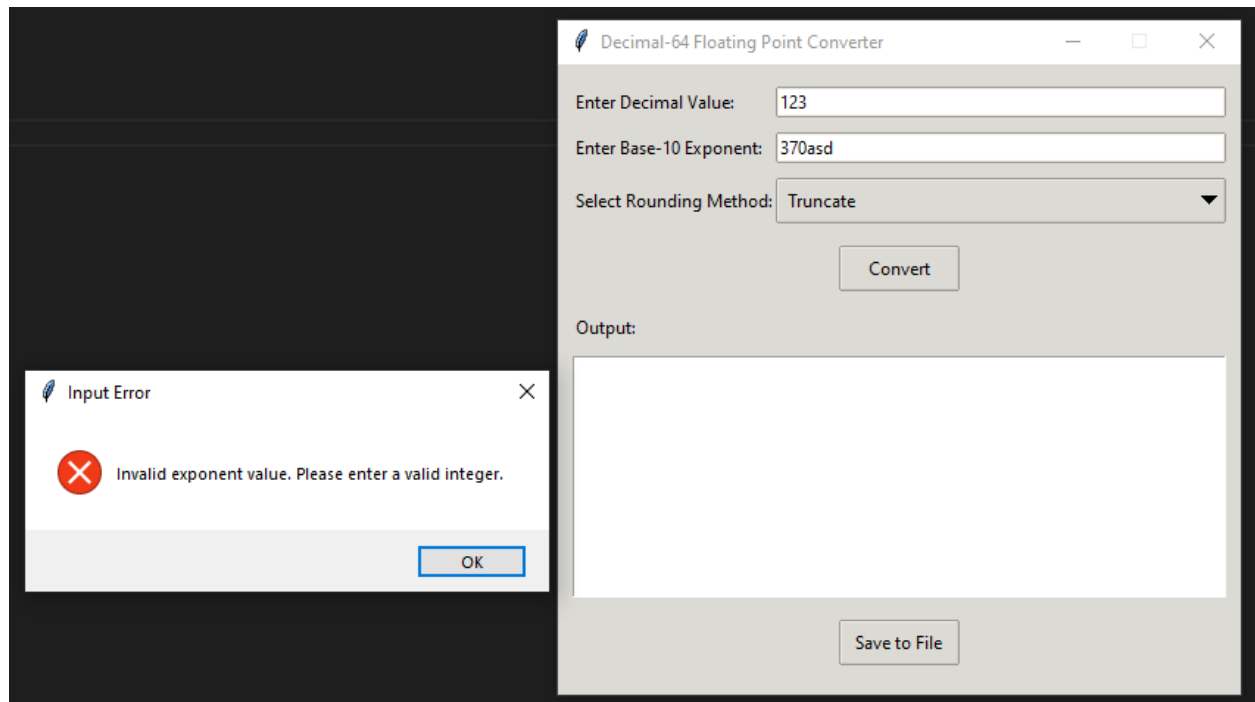
Invalid Input  
Decimal: 123ad  
Exponent: 370

---





Invalid Input  
Decimal: 123  
Exponent: 370asd



Invalid Input  
Decimal: *empty*  
Exponent: *empty*

---

