

Number System Conversions in Python 3

1. Binary to Other

Binary to Decimal:

```
binary = '11001'
decimal = int(binary, 2)
print(decimal)  # Output: 25
```

Binary to Octal:

```
binary = '11001'
decimal = int(binary, 2)
octal = oct(decimal)
print(octal)  # Output: 0o31
```

Binary to Hexadecimal:

```
binary = '11001'
decimal = int(binary, 2)
hexa = hex(decimal)
print(hexa)  # Output: 0x19
```

2. Octal to Other

Octal to Decimal:

```
octal = '31'
decimal = int(octal, 8)
print(decimal)  # Output: 25
```

Octal to Binary:

```
octal = '31'
decimal = int(octal, 8)
binary = bin(decimal)
print(binary)  # Output: 0b11001
```

Octal to Hexadecimal:

```
octal = '31'
decimal = int(octal, 8)
hexa = hex(decimal)
print(hexa)  # Output: 0x19
```

3. Decimal to Other

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Decimal to Binary:

```
decimal = 25  
binary = bin(decimal)  
print(binary) # Output: 0b11001
```

Decimal to Octal:

```
decimal = 25  
octal = oct(decimal)  
print(octal) # Output: 0o31
```

Decimal to Hexadecimal:

```
decimal = 25  
hexa = hex(decimal)  
print(hexa) # Output: 0x19
```

4. Hexadecimal to Other

Hexadecimal to Decimal:

```
hexa = '19'  
decimal = int(hexa, 16)  
print(decimal) # Output: 25
```

Hexadecimal to Binary:

```
hexa = '19'  
decimal = int(hexa, 16)  
binary = bin(decimal)  
print(binary) # Output: 0b11001
```

Hexadecimal to Octal:

```
hexa = '19'  
decimal = int(hexa, 16)  
octal = oct(decimal)  
print(octal) # Output: 0o31
```