Homework3

1.十进制转换为二进制

$57 = (111001)_2$

$128 = (10000000)_2$

$12.5 = (1100.1)_2$

$7.198 = (111.00110010101100000010000011000100100110111010011)$

$3972 = \ (111110000100)_2$

$0.00135 = (0.00000000010110000111100100111101110110010111111101100010101101)_2$

$1000 = (1111101000)_2$

2.二进制转换为十进制

$11010 = (26)_{10}$

$110 = (6)_{10}$

$11.101 = (3.625)_{10}$

$0.1011 = (0.6875)_{10}$

$111.11 = (7.75)_{10}$

$111111 = (63)_{10}$

3.二进制转八、十六进制及反之

$(101110101)_2 = (565)_8 = (175)_{16}$

$(1101100.11)_2 = (154.6)_8 = (6C.C)_{16}$

$(3756)_8 = (11111101110)_2$

$(415.213)_8 = (100001101.010001011)_2$

$(C6F02)_{16} = (11000110111100000010)_2$

$(5AB.4D9E)_{16} = (010110101011.0100110110011110)_2$

4.Unicode编号

```
>>> '计算概论(B)2022'.encode('utf-8')
b'\xe8\xae\xa1\xe7\xae\x97\xe6\xa6\x82\xe8\xae\xba(B)2022'
>>> '计算概论(B)2022'.encode('utf-16')
b'\xff\xfe\xa1\x8b\x97{\x82i\xba\x8b(\x00B\x00)\x002\x000\x002\x002\x00'
>>> '计算概论(B)2022'.encode('utf-32')
b'\xff\xfe\x00\x00\xa1\x8b\x00\x00\x97{\x00\x00\x82i\x00\x00\xba\x8b\x00\x00(\x00
\x00\x00B\x00\x00\x00)\x00\x00\x002\x00\x00\x000\x00\x00\x002\x00\x00\x002\x00\x0
0\x00'
>>> '计'.encode('utf-8')
b'\xe8\xae\xa1'
>>> '算'.encode('utf-8')
b'\xe7\xae\x97'
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>>> '概'.encode('utf-8')
b'\xe6\xa6\x82'
>>> '论'.encode('utf-8')
b'\xe8\xae\xba'
```