```
Base2Base
input: 1f
input base: 16
output base: 2
1f has decimal value 31.
1f expressed in Base 2 = 11111.
input: 12345
input base: 10
output base: 10
12345 has decimal value 12345.
12345 expressed in Base 10 = 12345.
input: 55555
input base: 6
output base: 16
55555 has decimal value 7775.
55555 expressed in Base 16 = 1e5f.
input: 55555
input base: 6
output base: 8
55555 has decimal value 7775.
55555 expressed in Base 8 = 17137.
input: 101110000
input base: 2
output base: 16
101110000 has decimal value 368.
101110000 expressed in Base 16 = 170.
input: 101110000
input base: 2
output base: 8
101110000 has decimal value 368.
101110000 expressed in Base 8 = 560.
input: 12212021
input base: 2
output base: 2
Invalid input number
Input inconsistent with base. Try again or exit program with blank line.
input: -42
Program terminated.
```