

Base change calculator

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October 11, 2015

In this project we figured out how to change the base of a number. The following program is the result. It also includes explanations.

PYTHON CODE

```
Num = 100 #The Number we want to change the base of
Count = Num #The value to change during process
Base = 7#The base we want the number to change to
Exp = 0 #The start exponent is 0
Output = "" #The string output

while Num > (Base**Exp): # If the Number is greater than the
    new base to the power of the exponent then loop should run.
    Mod = Count%(Base**(Exp+1)) #Calculate the mod of the
    Remaining number and the base and exponent
    Numeral = Mod/(Base**Exp) #Calculate the numeral
    Count= Count - Mod #Set the changing value to it self minus
    the mod value
    Output = Output + str(Numeral) #Add the numeral to the
    output string
    Exp = Exp + 1

print Output #When the while loop ends print the output which
is our number with a different base
```

OUTPUT

```
202 #The number 100 in base 7
```