computer science hw 2

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WHAT DOES THIS CODE DO?

```
this is the code that can coculate 5112 into base 2 formet and
calculate 2013which is being represented in base 4 into base 10.
```

it will took a lot longer to calculate without this code.

THE CODE

```
c=5112
a=5112
b=2
e=0
ans=""
while c>(b**e):
m=a%(b**(e+1))
n=m/(b**e)
ans=str(n)+ans
a=a-m
e=e+1
print ans


c="2013"
l=len(c)
b=4
e=0
ans=0
while e<l:
```

c means the number we are going to calculate and a means the starting number that we are going to put in this function, and b represent the base we are using.

the code will calculate from 5112 mod2 to the 0th power until c is not greater than b**e.

than it will print 5112 represented in base 2.

next code is similiar to the previous one, but reversed in some ways because the number is already represented in base4, so it is going to calculate and present it in its original form.

than it will print 2013 represented in base 10.

```
ans=ans+int(c[l-1-e])*(b**e)
e=e+1
print ans
```

```
1001111111000
135
```

This is the output of my program.