# Homework 20-10-15

> The homework this week: P80 1, 3, 4

The following programs are complied and running in `MinGW-W64-builds-4.3.5`.

1.

```c
#include <stdio.h>
#include <math.h>

int main(void)
{
    int n=10; // for n years
    double r=0.07, p; // annual gorwth rate et the final multiple

    p = pow(r+1, n);
    printf("%2.2lf%%\n", 100*(p-1)); // print the percentage
    // 96.72%

    return 0;
}
```

3.

```c
#include <stdio.h>
#include <math.h>

int main(void)
{
    double d, p, r, m;
    d = 300000;
    p = 6000;
    r = 0.01;

    m = log(p/(p-d*r))/log(1+r);
    printf("%2.1lf\n", m); // MinGW automatically rounding
    // 69.7

    return 0;
}
```

4. (1) Output：

```
c1=a,c2=b
c1=97,c2=98
```

`%c` -> character,ASCII. `%d` -> integer.

(2) Output：

```
c1=?c2=?
c1=-59,c2=-58
```

197 et 198 are -59 et -58 mod 256. They are not standard ASCII values.

(3) Output：

```
c1=a,c2=b
c1=97,c2=98
```

The same as (1).