Typical answer key for homework number 1

```c
#include <stdio.h>
//--------------------------------
int inord(int n)
{      if(n==0)
               return 1;
       else    if ((n%10) <=(n%100/10))
                       return 0;
               else
                       return inord(n/10);
}
//--------------------------------
int isPerftSq(int n,int i)
{      if ((i*i)>n)
               return 0;
       else
               if ((i*i)==n)
                       return 1;
               else
                       return isPerftSq(n,i+1) ;
}
//--------------------
int compose4(int n)
{
       return((n/1000%10)*1000+(n%100/10)*100+(n%10)*10+(n%1000/100));}
//----------------------
int sumdigit(int n)
{      if (n==0)
               return 0;
       else
               return n%10 + sumdigit(n/10);
}
//----------------------
int main ()
{
       for(int i=10000;i<100000;i++)
       if(isPerftSq(i,1) && inord(compose4(i)) && sumdigit(i)==27)
               printf ("\n the code is :  %d|\n",i);
}
```

Grading scale

- *Sumdigit* recursiv function   (4pts)
- *Compose4* function   (3pts)
- *inord* recursive function   (5pts)
- *isPerfectSq* recursiv function (5pts)
- *main* function   (3pts)