**Problem 1**

Number of digits in an integer is equal to the sum of closest integer of logarithm of base 10 of the integer and 1. So, using this fact I have written the code.

**Problem 2**

Properly written algorithm and a program code can make running time of the program to be smaller than with more complex algorithm. So, with the same speed of the processor well-ordered algorithm will proceed faster than more complex.

**Problem 9**

Moving disks of the tower, we usually move the biggest disk last and there is always a situation when there is a tower of height (n-1) which is on the middle pole, and we move the biggest disk to the final pole and then move the (n-1) tower to the final pole. Using this algorithm and recursion I defined the function:

* **HanoiTower(height,Pole1, Pole2, Pole3)**

*height – integer; Pole1, Pole2, Pole3 – string, used to print the names of poles (etc. ‘Left pole’, ‘Middle pole’, ‘Right pole’)*

the second function:

* **Disc(pos1, pos2)**

*Takes two arguments (string) to print that disk should be moved from pos1 to pos2.*