

```
int main (void)
{
    char num_string[12];
    long number = 6076;
    long factor=0;
    char factor_counter;
    long prime_num = 1, next_prime;

    setup_HW;
    if(watch_dog_reset == 1)String_to_PC_Basic("\r\n?");
    else String_to_PC_Basic("Factors: Enter number\r\n");

    number = Int_from_PC_Basic( num_string);
    while(1){
        next_prime = next_prime_number(prime_num);
        while (!(number%next_prime))
        {Int_to_PC_Basic(next_prime); Char_to_PC_Basic(' '); number /= next_prime;}
        prime_num = next_prime;
        factor += 1;
        if(!(factor%50))
        Char_to_PC_Basic('.');
        if (number==1)break;}
    SW_reset;}
```