

```
1  #include <stdio.h>
2
3  void main() {
4      int a, b, c;
5      int sum = 0;
6      scanf("%d %d %d", &a, &b, &c);
7
8      int k = a;
9      while(k <= b) {
10         sum += k;
11         k = k * c;
12     }
13
14     k = k / c;  /// revert value back.
15     k = k / c;  /// reduce the value again because we want a single peak.
16     /// Note that we actually do not need the second loop because the close form
17     /// is easy to derive.
18     while(k >= a) {
19         sum += k;
20         k = k / c;
21     }
22     printf("%d", sum);
23 }
```