

1. Write a program that takes three numbers and prints their sum. Every number is given on a separate line.
2. Write a program that reads the length of the base and the height of a right-angled triangle and prints the area. Every number is given on a separate line.
3. N students take K apples and distribute them among each other evenly. The remaining (the undivisible) part remains in the basket. How many apples will each single student get? How many apples will remain in the basket? The program reads the numbers N and K. It should print the two answers for the questions above.
4. Given the integer N - the number of minutes that is passed since midnight - how many hours and minutes are displayed on the 24h digital clock?
The program should print two numbers: the number of hours (between 0 and 23) and the number of minutes (between 0 and 59).
For example, if N = 150, then 150 minutes have passed since midnight - i.e. now is 2:30 am. So, the program should print 2 30.
5. A school decided to replace the desks in three classrooms. Each desk sits two students. Given the number of students in each class, print the smallest possible number of desks that can be purchased.
The program should read three integers: the number of students in each of the three classes, a, b and c respectively.
In the first test there are three groups. The first group has 20 students and thus needs 10 desks. The second group has 21 students, so they can get by with no fewer than 11 desks. 11 desks are also enough for the third group of 22 students. So, we need 32 desks in total.
6. Solve each of the following problems using Python Scripts. Make sure you use appropriate variable names and comments. When there is a final answer have Python print it to the screen.
A person's body mass index (BMI) is defined as:
$$\text{BMI} = \text{mass in kg} / (\text{height in m})^2$$
7. You live 4 miles from university. The bus drives at 25mph but spends 2 minutes at each of the 10 stops on the way. How long will the bus journey take? Alternatively, you could run to university. You jog the first mile at 7mph; then run the next two at 15mph; before jogging the last at 7mph again. Will this be quicker or slower than the bus?
8. Write a Python program which accepts the radius of a circle from the user and compute the area. (area of circle = $\pi * r^2$)
9. Write a python program to find sum of the first n positive integers.

$$\text{sum} = (n*(n+1))/2$$

10. Write a Python program to convert seconds to day, hour, minutes and seconds.