

ESCAPE.8XP

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This program finds the escape velocity of a body given the mass of the body and the distance from the body.

The program prompts the user for the mass of a body in kilograms and the distance from the center of the body in kilometers. The equation

$$\sqrt{\frac{2GM}{R}}$$

is used to find the escape velocity where M is mass, R is radius from the center, and G is the gravitational constant ($G=6.67384 \times 10^{-11} \text{ m}^3 \text{ kg}^{-1} \text{ s}^{-2}$).

The escape velocity is output in meters per second.