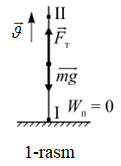
**2.** Massasi 3000 kg bo‘lgan raketa, 1km balandlikka 60s da ko‘tarilishi uchun u qanday quvvatga ega bo‘lishi kerak? Harakatni tekis tezlanuvchan deb hisoblang (1-rasm).

**Yechish:**

Raketaga  tortish kuchi va mg ogo‘irlik kuchi ta’sir etadi. Raketani ko‘tarishda bajarilgan ish I- va II-holatlardagi energiyalar ayirmasiga teng bo‘ladi:

,

bu yerda .

Bularga asosan  ni olamiz.

Ma’lumki, quvvati  ga teng.

Bunga ishning yuqorida olingan ifodasini olib kelib qo’yamiz:



Tekis tezlanuvchan harakat uchun tezlikni ifodasini aniqlaymiz.

Tezlikning bu ifodasini yuqoridagi quvvatni formulasiga olib borib qo‘yamiz:



**Javob:**

from tkinter import \*  
from tkinter.ttk import Separator  
  
  
def solution():  
 *"""Dasturning asosiy funksiyasi. Bunda massa, high va times qiymatlar kiritiladi.  
 Qo'yilgan masala yuzasidan hisob kitoblar amalga oshiriladi."""* def count\_result():  
 *""""Asosiy hisoblash uchun funksiya"""* try:  
 massa = int(M.get())  
 high = int(H.get()) \* 1000  
 times = int(t.get())  
  
 result\_1 = ((2 \* high) / (9.8 \* (times \*\* 2))) + 1  
 result\_2 = ((massa \* 9.8 \* high \* result\_1) / times) / 10 \*\* 6  
 result['text'] = f"Raketaning quvvati {'{:.2f}'.format(result\_2)} MWga ega bo'lishi kerak."  
  
 except ValueError:  
 result['text'] = f"Qiymatlarni kiritishda hatolik bor."  
  
 root = Tk()  
 root.geometry("820x560")  
 root.title("Program 2.")  
 root.configure(bg="#FFFFCC")  
 label\_1 = Label(root,  
 text="Massasi M (kg) bo‘lgan raketa, H (km) balandlikka t (sekind)da \n"  
 "ko‘tarilishi uchun u qanday quvvat (MW) ga ega bo‘lishi kerak? \n"  
 "Harakatni tekis tezlanuvchan deb hisoblang.\n")  
  
 label\_1.config(bg="#FFFFCC", font=('Helvetica', 14))  
 label\_1.pack()  
 separator = Separator(root, orient='horizontal')  
 separator.pack(fill='x')  
  
 space\_1 = Label(root, text="", bg="#FFFFCC")  
 space\_1.pack()  
  
 label\_M = Label(root, text="Raketaning massasi M(kg)", font=('Helvetica', 14), bg="#FFFFCC")  
 label\_M.pack()  
 M = Entry(root, font=("Helvetica", 14))  
 M.pack(padx=7, pady=5)  
  
 label\_H = Label(root, text="Raketa uchish balandligi H(km)", font=('Helvetica', 14), bg="#FFFFCC")  
 label\_H.pack()  
 H = Entry(root, font=("Helvetica", 14))  
 H.pack(padx=7, pady=5)  
  
 label\_t = Label(root, text="Ko'tarilish vaqti t(sekund)", font=('Helvetica', 14), bg="#FFFFCC")  
 label\_t.pack()  
 t = Entry(root, font=("Helvetica", 14))  
 t.pack(padx=7, pady=5)  
  
 result = Label(root, text="", font=('Helvetica', 14), bg="#FFFFCC")  
 result.pack()  
  
 button\_3 = Button(root, text="Natijani ko'rish", font=('Helvetica', 14), command=count\_result)  
 button\_3.pack()  
  
 space\_2 = Label(root, text="", bg="#FFFFCC")  
 space\_2.pack()  
 root.bind("<x>", count\_result)  
  
 root.mainloop()  
  
  
if \_\_name\_\_ == "\_\_main\_\_":  
 solution()