# PS NO. 99003188

# Project: Alarm Clock (with oops concept) PS NO. 99003188

# import datetime module

import datetime

# import regular expression module

import re

# class for main setup alarm

class alarm():

print("Enter the time in 12 hours format(HH:MM) ")

# constructor to intialize variables required for function

def \_\_init\_\_(self, alarm\_minute=0, alarm\_hour=0, alarm\_am\_pm=0):

self.alarm\_hour = int(input("Enter HH: "))

self.alarm\_minute = int(input("Enter MM: "))

self.alarm\_am\_pm = str(input("am or pm: "))

self.lg = self.label()

# method for setup for alarm

def alarm\_setup(self):

if (self.alarm\_hour > 13 or self.alarm\_hour < 1):

print("please enter a valid time")

exit()

if (self.alarm\_minute > 61 or self.alarm\_minute < 0):

print("please enter a valid time")

exit()

if (self.alarm\_am\_pm != "am" and self.alarm\_am\_pm != "pm"):

print("please enter valid details")

exit()

if (self.alarm\_am\_pm == 'pm'):

self.alarm\_hour = self.alarm\_hour+12

while(1):

if (self.alarm\_hour == datetime.datetime.now().hour and

self.alarm\_minute == datetime.datetime.now().minute):

print("wake up now")

break

# creating a class for label, which is used to note down important requirements

class label:

def label\_show(self):

enter\_label = str(input("Enter the label"))

# creating a class for snooze option

class snooze(alarm):

# creating a constructor for intializing the variables

def \_\_init(self, alarm\_minute1=0, alarm\_hour1=0):

self.alarm\_minute1 = self.alarm\_minute

# creating a method called as snooze

def alarm\_snooze(self):

miss\_var1 = str(input("Enter Y to snooze "))

if (miss\_var1 == "Y"):

alarm\_snooze\_min = int(input("Enter the snooze time in MM format"))

else:

exit()

self.alarm\_minute = self.alarm\_minute + alarm\_snooze\_min

if (alarm\_snooze\_min > 31 or alarm\_snooze\_min < 0):

print("Enter a valid time: ")

exit()

if(self.alarm\_minute > 61):

self.alarm\_hour = self.alarmhour+1

if (self.alarm\_hour > 12):

self.alarm\_hour = 1

self.alarm\_minute = self.alarm\_minute+alarm\_snooze\_min-60

# method to print after alarm

def alarm\_snooze\_function(self):

if (self.alarm\_am\_pm == 'pm'):

self.alarm\_hour = self.alarm\_hour+12

while(1):

if (self.alarm\_hour == datetime.datetime.now().hour and

self.alarm\_minute == datetime.datetime.now().minute):

print("wake up now")

break

# creating a class to display the final comments

class display(snooze):

def display\_output(self):

print("Thank you for using alarm clock")

object1 = alarm()

object2 = snooze()

object3 = object2.lg

object4 = display()

object1.alarm\_setup()

object3.label\_show()

object2.alarm\_snooze()

object2.alarm\_snooze\_function()

object4.display\_output()

# regular expressions

print(re.search("[a-z]+[1-9][@][a-z]+[.][a-z]+", "prabhurithesh1@gmail.com"))

Github link: <https://github.com/99003188/pythonminiproject>



Fig1: Code quality

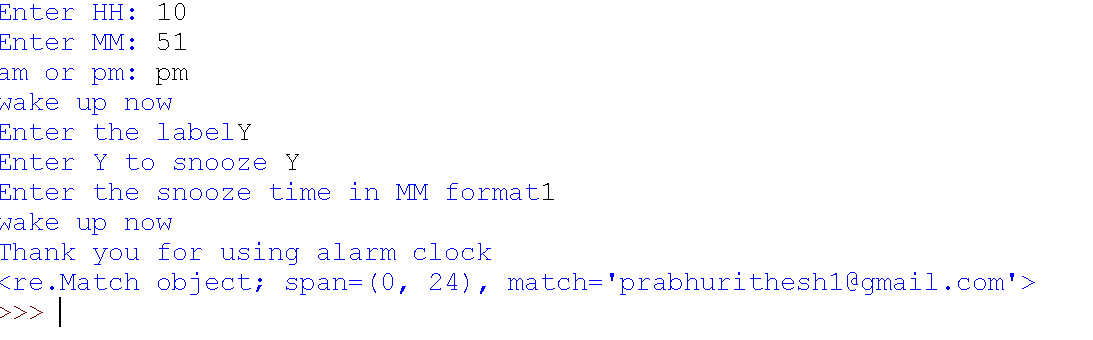


Fig2: Output of the project