**PYTHON PROJECT**

# Program to find angle between hour and minutes hand  
  
  
def clockangle(hour, minutes):  
 if 00 <= hour <= 24 and 00 <= minutes <= 60:  
 # converting the 24hr format to 12 to make calculation easier  
 if hour > 12:  
 hour = hour - 12  
 # if user inputs 3:60 the program will assume the time as 4:00  
 if minutes == 60:  
 hour = hour + 1  
 minutes = 00  
 # calculating the angle  
 hour = hour + minutes / 60  
 handiff = abs(hour - minutes / 5)  
 preangle = handiff \* 30  
 postangle = min(preangle, 360 - preangle)  
 return postangle  
 else:  
 print("Enter a correct time.")  
 exit()  
  
  
print("\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\n")  
print("Give a time in hh:mm format in 24 hour notation")  
print("\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\n")  
postangle = clockangle(int(input("Hour: ")), int(input("Minutes: ")))  
angle = format(postangle, ".2f")  
print("\nThe difference between the hour and the minute hand is", angle + "°")

**OUTPUT:**

Give a time in hh:mm format in 24 hour notation

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Hour: 5

Minutes: 30

The difference between the hour and the minute hand is 15.00°

Process finished with exit code 0