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# By submitting this assignment, all team members agree to the following:
# "Aggies do not lie, cheat, or steal, or tolerate those who do"
# "I have not given or received any unauthorized aid on this assignment"
#
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# Section: 462
# Assignment: Lab4a_Act2.py
# Date: 19 09 2020
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Lab4a_Act2

- Variables for hours, fee total
- If the input is negative, we know that symbolizes that they lost their ticket, so they need an extra charge, but we also need to change the number into a positive integer.
- To figure out an algorithm, we need to think about the format of the input. Since it is in decimal form, we need to figure out steps to round up to the next integer.
- If it is a decimal, we need to divide the number by 1 without a remainder, and then add 1
- If it is a whole number, we would not need to add one, we would want it to stay the same
- In order to find out if it is a decimal, we need to add an if statement to see if the input is larger than the input divided by 1 without remainder.
- For multiple days. We need to subtract 24 hours for each day and add 24 to the total for each day

```
#prompt user to enter hours parked in decimal form
print("Enter the hours parked as a decimal number. Include a negative sign if the ticket is lost.")
z= float(input("Please enter the hours parked: "))
h= z #original input
y=0 #fee total
#for input of negative sign, we change x to positive value to calculate fee and add penalty fee
if z < 0:
    y+=36
    z = 0 - z
#rounds up decimal to integer
x=(z//1)
if z>x:
    x+=1

#use if/elif statements to assign correct fee
if x==0:
    print("Parking for",h,"hours please pay $%.0f"%y)
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elif 0<=x<=2:
    y+=4
    print("Parking for",h,"hours please pay $%.0f"%y)
elif 2<=x<=4:
    y+= 4+3
    print("Parking for",h,"hours please pay $%.0f"%y)
elif 5<=x<=21:
    y+= 7+(x-4)
    print("Parking for",h,"hours please pay $%.0f"%y)
elif 22<=x<=24:
    y+=24
    print("Parking for",h,"hours please pay $%.0f"%y)
elif 24<x:
    a = x//24
    b = x%24
    y+= 24*a
    if b==0:
        print("Parking for",x,"hours please pay $%.0f"%y)
    if 0<b<=2:
        y+=4
        print("Parking for",h,"hours please pay $%.0f"%y)
    elif 2<=b<=4:
        y+= 7
        print("Parking for",h,"hours please pay $%.0f"%y)
    elif 5<=b<=23:
        y+= 7+(b-4)
        print("Parking for",h,"hours please pay $%.0f"%y)
```