

Natalie Pronk

CMPR 114 Professor Huynh

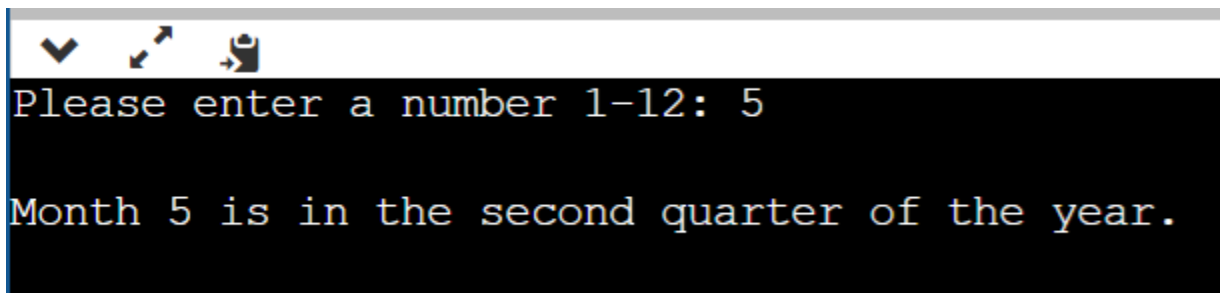
HW 2

February 18th, 2023

## Project 1

```
num = int(input('Please enter a number 1-12: '))

if num >=1 and num <= 3:
    print("\nMonth", num,"is in the first quarter of the year.")
elif num >=4 and num <= 6:
    print("\nMonth", num,"is in the second quarter of the year.")
elif num >=7 and num <= 9:
    print("\nMonth", num,"is in the third quarter of the year.")
elif num >=10 and num <= 12:
    print("\nMonth", num,"is in the fourth and last quarter of the year.")
else:
    print("\nError: Please enter a number 1 - 12")
```

A terminal window with a dark background and a light gray title bar. The title bar contains three icons: a checkmark, a cursor, and a document. The terminal displays the prompt "Please enter a number 1-12:" followed by the user input "5". Below this, it prints "Month 5 is in the second quarter of the year.".

Please enter a number 1-12: 5

Month 5 is in the second quarter of the year.

## Project 2

```
print("Time to get ready for a cookout!")

hdpkg = int(10) #hot dogs per package
hdbun = int(8) #hot dog buns per package

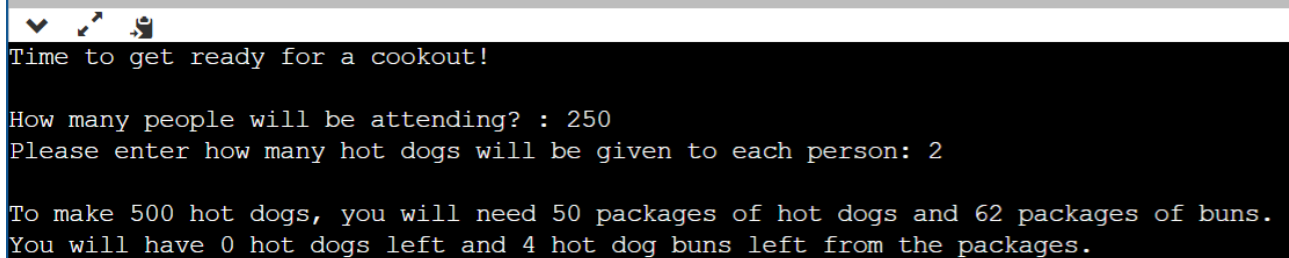
people = int(input("\nHow many people will be attending? : "))
hotDogPerPerson = int(input("Please enter how many hot dogs will be given to each person: "))

hotDogs = int(hotDogPerPerson*people) #required hot dogs
reqPkg = int(hotDogs/hdpkg) #required hot dog packages
reqBun = int(hotDogs/hdbun) #required hot dog bun packages

print("\nTo make", hotDogs,"hot dogs, you will need", reqPkg, "packages of hot dogs and", reqBun, "packages of buns.")

hotDogsLeft = hotDogs % hdpkg #remaining number of hotdogs Left in the package
bunsLeft = hotDogs % hdbun #remaining number of hotdogs Left in the package

print("You will have", hotDogsLeft, "hot dogs left and", bunsLeft, "hot dog buns left from the packages.")
```

A terminal window with a dark background and light green text. It shows the execution of the Python code from the previous block. The output matches the expected results: 250 people, 2 hot dogs per person, 50 hot dog packages, and 62 hot dog bun packages are needed. There are 0 hot dogs and 4 hot dog buns left over.

```
Time to get ready for a cookout!

How many people will be attending? : 250
Please enter how many hot dogs will be given to each person: 2

To make 500 hot dogs, you will need 50 packages of hot dogs and 62 packages of buns.
You will have 0 hot dogs left and 4 hot dog buns left from the packages.
```

## Project 3

```
9 print("Thank you for choosing to purchase from our company!")
10
11 price = float(99.00) #price per package
12 packages = int(input("\nPlease enter the amount of software packages you will be purchasing: ")) #packages purchased
13
14 if packages >= 0 and packages <= 9:
15     total = price * packages
16     print("\nYour total will be $", round(total,2))
17     print("You were not eligible for a discount. Thank you for your purchase!")
18 elif packages >= 10 and packages <= 19:
19     total = (price * packages) *.9
20     print("\nYour total will be $", round(total,2))
21     print("You received a 10% off discount, thank you for your purchase!")
22 elif packages >= 20 and packages <= 49:
23     total = (price * packages) *.8
24     print("\nYour total will be $", round(total,2))
25     print("You received a 20% off discount, thank you for your purchase!")
26 elif packages >= 50 and packages <= 99:
27     total = (price * packages) *.7
28     print("\nYour total will be $", round(total,2))
29     print("You received a 30% off discount, thank you for your purchase!")
30 elif packages >= 100:
31     total = (price * packages) *.6
32     print("\nYour total will be $", round(total,2))
33     print("You received a 40% off discount, thank you so much for your purchase!")
34 else:
35     print("Error calculating your total. Please enter a valid number of packages.")
```



Thank you for choosing to purchase from our company!

Please enter the amount of software packages you will be purchasing: 87

Your total will be \$ 6029.1

You received a 30% off discount, thank you for your purchase!