Day 4:Control Statements

Solve the below questions:

```
# 1. Python program to check leap year.

year = int(input("Enter year:"))



#To check whether the year is leap year or not

# The following conditions need to be checked

#1. year must be divisible by 4 OR

#2. if the year is divisible by 100 then it must also be divisible by 400



If year%4==0 or (year%100==0 and year%400==0): # If the above conditions are
met, then it will be a leap year.

   print("Yes, This is a leap year")



else :

   print("The Year is not a leap year!") #else its consider as non leap year

print("-------------------------------------------")
```

```python
# 2. Python Program to Find the Largest Among Three Numbers.


#Accept three numbers from the user

num1 = int(input("Please enter first number: "))

num2 = int(input("Please enter second number: "))

num3 = int(input("Please enter third number: "))


#if 1st no. is greater than the other two then it is the largest number apply this condition to all three no.

if num1>num2 and num1>num3:

   print(num1,"is largest number..!")


elif num2>num1 and num2>num3:

   print(num2,"is largest number..!")

else :

   print(num3,"is largest number..!")

print("-----------------------------------------")
```

```python
# 3. Python Program to Check if a Number is Positive, Negative, or 0.

integer = int(input("Enter any integer: ")) #Accept input from user


if integer>0:

   print("Given integer is Positive")


else:

   print("Given integer is Negative")

print("-----------------------------------------")
```

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# 4. A toy vendor supplies three types of toys:

# Battery Based Toys, Key-based Toys, and Electrical Charging Based Toys.

# The vendor gives a discount of 10% on orders for battery-based toys

# if the order is for more than Rs. 1000. On orders of more than Rs. 100 for key-based toys,

# a discount of 5% is given, and a discount of 10% is given on orders for electrical charging

# based toys of value more than Rs. 500. Assume that the numeric codes 1,2 and 3 are used

# for battery based toys, key-based toys, and electrical charging based toys respectively.

# Write a program that reads the product code and the order amount and

# prints out the net amount the customer must pay after the discount.

print("product code for different toys:\n Battery Based Toy = 1 \n Key Based Toys = 2 \n Electrical Charging Based Toys = 3")

product_code = int(input("Enter the product code: ")) #accept product code from user

order_amount = int(input("Enter the Order Amount : ")) #accept order_amt from user



if product_code == 1:

   print("You Ordered Battery Based Toy")

   if order_amount > 1000:

       discount = order_amount - 10/100

       print("Your order for Battery based toy is Rs.",order_amount)

       print("Congrats, You got 10% discount")

       print("Your Payable amount after discount is Rs.",discount)
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   else :
       print("Your order for battery-based is ",order_amount,"You are not
eligible for discount")


if product_code == 2:
   print("You Ordered Key Based Toys")
   if order_amount > 100:
       discount = order_amount - 5/100
       print("Your order for Key Based Toys is Rs.",order_amount)
       print("Congrats, You got 5% discount")
       print("Your Payable amount after discount is Rs.",discount)


   else :
       print("Your order for Key Based Toys is Rs.",order_amount,"You are not
eligible for discount")


if product_code == 3:
   print("Electrical Charging Based Toys")
   if order_amount > 500:
       discount = order_amount - 10/100
       print("Your order for Electrical Charging Based Toys is
Rs.",order_amount)
       print("Congrats, You got 10% discount")
       print("Your Payable amount after discount is Rs.",discount)


   else :
       print("Your order for Electrical Charging Based Toys is
Rs.",order_amount,"You are not eligible for discount")
```

```
print(".....Thank you for coming.....")

print(".....Have a nice day!.....")



print("------------------------------------------------------------")
```

```
# 5. A transport company charges the fare according to the following table:


# Distance   Charges


# 1-50            8 Rs./Km


# 51-100         10 Rs./Km


# > 100            12 Rs/Km


# Write a Python program to calculate the transport distance entered by the user.


Dist = int(input("What is the transport distance in km:")) #accept dist from user in km
if Dist <=50: #it checks whether Dist is less than or equal to 50 km.
   print("Rs.8/km charges are applicable") #if yes then charges are Rs.8/km
   charges = 8 * Dist
   print("Final Charges are",charges)


elif 100 > Dist >= 51: #It checks whether Dist is less than 100 and greater than or equal to 51 km.
   print("Rs.10/km charges are applicable") #if yes then charges are Rs.10/km
   charges = 10 * Dist


   print("Final Charges are",charges)
```

```
else :
   print("Rs.12/km charges are applicable") #else charges are Rs.12/km
   charges = 12 * Dist
   print("Final Charges are",charges)
```

Output: