Assignment 1:Temparature check

Problem:Write a program that takes the current temperature as input and prints:

- "It's too cold!" if below 10°C
- "It's cool outside" if between 10°C and 25°C
- "It's hot outside!" if above 25°C

```
temp=int(input("Enter Current Temparature"))

if temp <10:
  print("its too cold!")
elif 10<temp<25:
    print("it is cold Outside")
else:
    print("its hot outside")
```

```
Enter Current Temparature25
its hot outside
```

Assignment 2:ATM Withdrawal system

Problem:Ask the user for their account balance and the amount they want to withdraw.

- If the withdrawal amount is greater than the balance → print "Insufficient Balance"
- If the withdrawal amount is less than or equal to balance → print "Transaction Successful" and show the remaining balance.

```
balance = 500
amount = int(input("Entry Amount to Withdraw"))
print("Entered Amount =" ,amount)

if amount > balance:
  print("Status:Insufficient Balance.",end="-")
  print("Youre Current balance is BDT:",balance)

else:
  print("Status:Transaction Successfull!.",end="-")
  print("Youre Current balance is:BDT",balance)
```

```
Entry Amount to Withdraw600
Entered Amount = 600
Status:Insufficient Balance.-Youre Current balance is BDT: 500
```

Assignment 3:Student Grade Calculator

Problem:Input marks (0–100) and print grade based on:

- 90–100 → A+
- 80–89 → A
- 70–79 → B
- 60–69 → C
- Below 60 → Fail

```
grade = int(input("Enter your Mark:"))

if 90<=grade<100:
  print("Congratulation!! you have got (A+)")
elif 80<=grade<89:
  print("Congratulation!! you have got (A)")
elif 70<=grade<79:
  print("Congratulation!! you have got (B)")
elif 60<=grade<69:
  print ("Congratulation!! you have got (C)")
else:
  print("Fail")
```

```
Enter your Mark:50
Fail
```

Assignment 4:Bus Ticket Discount

Problem:Ask the user for age and print ticket price:

- Below 5 → Free
- 5–18 → 50% Discount
- 60 or above → 30% Discount
- Others → Full Price

```
tp = 1500
age = int(input("Enter Age:"))

if age<5:
  print("Your Ticket Is free,Enjoy!!")

elif 5<=age<=8:
  print("You Have Got 50% Discount")
  print("Your Ticket Price is:BDT", ((50 / 100)*tp))
elif age>=60:
  print("You have got 60% Discount")
  print("Your Ticket Price is:BDT", ((60 / 100)*tp))
else:
  print("You have to pay Full Price")
```

```
Enter Age:7
You Have Got 50% Discount
Your Ticket Price is:BDT 750.0
```

Assignment 5:Restaurant Bill With Discount

Problem:Take total bill amount from the user:

- If the bill is above 1000 → apply 10% discount
- Otherwise → no discount

Then print the final bill amount.

```
Total_bill_amount = int(input("Enter Your Total Bill Amount:"))
tp_10=((10/100)*Total_bill_amount)

if Total_bill_amount > 1000:
  print("You have got 10% Discount!! and Discount Amount:BDT", tp_10 )
  print("Your final Bill:",(Total_bill_amount-tp_10))
else:
  print("You have got 0% Discount!!")
  print("Your Final Bill:",Total_bill_amount)
```

```
Enter Your Total Bill Amount:500
You have got 0% Discount!!
Your Final Bill: 500
```

Assignment 6: Login Authentication

Problem:Take a username and password input.

- If username == "admin" and password == "12345" → print "Login Successful"
- Else → print "Invalid Credentials"

```
#username == "admin" and password == "12345"
usr = input("Enter User ID:")
pw = input("Enter Password:")
```

```
if usr =="admin" and pw == "12345" :
  print("Login Successful")
else:
  print("Invalid Credentials")
```

```
Enter User ID:admin
Enter Password:12345
Login Successful
```

Assignment 6:Extended (if pass wrong)

```
#username == "admin" and password == "12345"
usr = input("Enter User ID:")
pw = input("Enter Password:")

if usr =="admin" and pw == "12345" :
  print("Login Successful")

elif usr =="admin" and pw != "12345" :
  print("Wrong Password")
  print("Please enter password again")
  pw = input("Enter Password:")
  if usr =="admin" and pw == "12345" :
    print("Login Successful")
  else:
    print("Invalid Credentials")
a
else:
  print("Invalid Credentials")
```

```
Enter User ID:sds
Enter Password:sd
Invalid Credentials
```

Assignment 7: Traffic Light System

Problem:Ask the user to input a color (red, yellow, or green).

Print:

- "Stop" for red
- "Ready to go" for yellow
- "Go" for green
- "Invalid color" otherwise

```
#Ask the user to input a color (red, yellow, or green).

clr= input("Entr Traffice light Color:")

if clr == "red":
  print("STOP")
elif clr == "yellow":
  print("Ready to GO")
elif clr == "green":
  print("GO")
else:
  print("Invalied Color")
```

```
Entr Traffice light Color:blk
Invalied Color
```

Assignment 8: Leap Year Checker

Problem:Take a year as input and check:

- If it is divisible by 400 ⟶ Leap Year
- Else if divisible by 4 but not by 100 ⟶ Leap Year
- Otherwise ⟶ Not a Leap Year

```
yr= int(input("Enter Year:"))

if yr % 400 == 0:
    print(yr, "is a Leap Year")
elif yr % 4 == 0 and yr % 100 != 0:
    print(yr, "is a Leap Year")
else:
    print(yr, "is Not a Leap Year")
```

```
Enter Year:2023
2023 is Not a Leap Year
```

Assignment 9: Job Eligibility Checker

Problem:Take a year as input and check:

- If it is divisible by 400 ⟶ Leap Year
- Else if divisible by 4 but not by 100 ⟶ Leap Year
- Otherwise ⟶ Not a Leap Year

```
print("To check Job Eligibility Checker")
age = int(input("Enter Age:"))
degree = input("Enter Degree:")

if age>=18 and degree == "graduate". :
  print("Eligible for Job")

else:
  print("Not Eligible")
```

```
To check Job Eligibility Checker
Enter Age:17
Enter Degree:gew
Not Eligible
```

Assignment 10: Electricity Bill Calculator

Problem:Input number of units consumed and calculate bill:

- Up to 100 units ⟶ 5 BDT per unit
- 101–200 units ⟶ 7 BDT per unit
- Above 200 units ⟶ 10 BDT per unit

Print total payable amount.

```
unit = int(input("Enter Consumed Unit:"))

if unit <= 100:
  print("Total Bill Amount:BDT" , (unit*5))

elif unit <= 200:
  #1st 100*5
  level_1=500
  rest_unit=unit-100

  #2nd layer unit*7
  level_2=rest_unit*7


  total_bill=level_1 + level_2
  print("Total bill Amount:BDT",total_bill)

else:
  #1st 100*5
  level_1=500
  rest_unit=unit-100

  #2nd layer unit*7
  level_2 =700
  rest_unit=unit-200
```

```
  #3rd layer unit*10
  level_3=rest_unit*10
  total_bill=level_1 + level_2 + level_3
  print("Total bill Amount:BDT",total_bill)
```

```
Enter Consumed Unit:80
Total Bill Amount:BDT 400
```

Start coding or generate with AI.