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## Task 1: Mini Calculator

This program:

- Asks the user to enter two numbers.
- Asks what operation they want: add, subtract, multiply, or divide.
- Performs the chosen operation and shows the result.
- If the user chooses divide and the second number is 0, it gives an error (to avoid division by zero).

**Code:**

task3.py > ...

```python
## task 1
print(" **********  Your Mini Calculator  **********")
num1=int(input("Enter first number: "))
num2=int(input("Enter second number: "))
choice=input("Enter your choice (add, subtract, multiply, divide): ").strip().lower()
if choice == "add":
    result=(num1 + num2)
    print(f"Addition {result}")
elif choice == "subtract":
    result=(num1 - num2)
    print(f"Subtraction {result}")
elif choice == "multiply":
    result=(num1 * num2)
    print(f"Multiplication {result}")
elif choice == "divide":
    if num2 != 0:
        result=(num1 / num2)
        print(f"Division {result}")
    else:
        print("Error: Division by zero is not allowed.")


```

## Task 2: Marks Calculator and Grade System

This program:

- Takes marks of 3 subjects from the user.
- Calculates total marks and percentage.
- Decides the grade based on the percentage:
    - 80% or above → Grade A
    - 70% or above → Grade B
    - 50% or above → Grade C
    - Below 50% → Fail

```
#-------------------------------------------------------------------------------------------------------#

# task 2

print("Marks Calculator and Grade System")
sub1=float(input("Enter marks for Subject 1:"))
sub2=float(input("Enter MARKS FOR Subject 2:"))
sub3=float(input("Enter marks for Subject 3:"))

total_marks=sub1+sub2+sub3
percentage=total_marks/3

if percentage >= 80:
    grade="A"
    print(f"Your Total marks are {total_marks} & Percentage is {percentage}%, A grade.")
elif percentage >= 70:
    grade="B"
    print(f"Your Total marks are {total_marks} & Percentage is {percentage}%,B grade.")
elif percentage >= 50:
    print(f"Your Total marks are {total_marks} & Percentage is {percentage}%,  C grade.")
    grade="C"
else:
    grade="Fail"
    print(f"Your Total marks are {total_marks} & Percentage is {percentage}%, Your Fail .")


#                                                                                                       #
```

**Task 3: Salary and Saving Checker**

This program:

- Takes the salary and expenses of the user.
- Calculates savings = salary − expenses.
- Tells the user how well they are saving:

- Saving > 100,000 → "Well Saving"
- Saving between 5,000 and 9,999 → "Good Saving"
- Otherwise → "Try to save money"

```python
#-----------------------------------------------------------------------------------------------------#

#task 3

salary=float(input("Enter your salary:"))

if salary <0:
    salary=float(input("Error: Salary cannot be negative. Please enter a valid salary: "))
expenses=float(input("Enter your expenses:"))
saving=salary - expenses
if saving > 100000:
    print("well Saving")
elif saving < 9999 and saving > 5000:
    print("Good Saving")
else:
    print("try to save money")


#-----------------------------------------------------------------------------------------------------#
```

## Task 4: Login System

This program:

- Asks the user for a username and password.
- If username is admin and password is 1234, access is granted.
- Otherwise, access is denied.

```python
#-----------------------------------------------------------------------------------------------------#

#task 4
## user name is admin and password is 1234
print("Welcome to the Login System")

username=input("Enter your username:")
password=input("Enter your password:")
if username == "admin" and password == "1234":
    print("Accessed successful!")
else:
    print("Access denied! ")


```

## Task 5: Promotion Checker

This program:

- Takes attendance percentage and marks from the user.
- Checks:
    - If attendance is 75% or more **and** marks are 50 or more → "Promoted"
    - Otherwise → "Not Promoted"

```
81  #-------------------------------------------------------------------------------
82
83  #task 5
84
85  attendance_percentage=float(input("Enter your attendance percentage: "))
86  marks=float(input("Enter your marks: "))
87  if attendance_percentage >= 75 and marks >= 50:
88      print("Promoted.")
89  else:
90      print("Not Promoted.")
91
92
```

**Task 6: Product Discount Calculator**

This program:

- Takes quantity and price of the product.
- Calculates total price and applies discount based on rules:
    - If price > 1000 and product < 3 → 15% discount
    - If price ≤ 500 → 10% discount
    - Otherwise → No discount
- Shows total price, discount amount, and final price.

```python
#task 6
product=int(input("Enter the product quantity: "))
price=int(input("Enter price of the product: "))

if price > 1000 and product < 3:
    discount=0.15
elif price <= 500 :
    discount=0.10
else:
    discount=0.0
total_price = product * price
discount_amount = total_price * discount
final_price = total_price - discount_amount
print(f"Total price: {total_price}, Discount: {discount_amount}, Final price: {final_price}")
```