

```
In [6]: print("::::::::::::Percentage -> Grades::::::::::::\n\n")
per = int(input("Enter Percentage :"))

print("enterd Percetage : ",per)

if per <= 100 :
    if(per <= 100 and per > 85) :
        print("Grade: A\nPerc: ",per,"\nPASS")
    elif(per <= 85 and per > 70) :
        print("Grade: B\nPerc: ",per,"\nPASS")
    elif(per <= 70 and per > 55) :
        print("Grade: C\nPerc: ",per,"\nPASS")
    elif(per <= 55 and per > 40) :
        print("Grade: D\nPerc: ",per,"\nPASS")
    elif(per <= 40 and per >= 33) :
        print("Grade: E\nPerc: ",per,"\nPASS")
    elif(per < 33) :
        print("Grade: --\nPerc: ",per,"\nFAIL")
else :
    print("::Invalid Percentage::")
```

::::::::::::Percentage -> Grades::::::::::::

enterd Percetage = 88  
Grade: A  
Perc: 88  
PASS

```
In [11]: print("::::::::::::Leap Year::::::::::::\n\n")
year = int(input("Enter Year to check leap Year :"))

print("Enterd Year : ",year)
if year % 4 == 0 :
    print(year,"is a leap year")
else :
    print(year, "is not a leap year")
```

::::::::::::Leap Year::::::::::::

Enterd Year : 2024  
2024 is a leap year

```
In [12]: print("::::::::::::Quadratic Equation(ax2+bx+c=0):::::::::::::\n\n")
import cmath as cm
a = float(input('Enter a: '))
b = float(input('Enter b: '))
c = float(input('Enter c: '))

d = (b**2) - (4*a*c)

sol1 = (-b-cm.sqrt(d))/(2*a)
sol2 = (-b+cm.sqrt(d))/(2*a)
print('The solution are {0} and {1}'.format(sol1,sol2))
```

::::::::::::Quadratic Equation(ax2+bx+c=0):::::::::::::

The solution are  $(-0.6-0.2j)$  and  $(-0.6+0.2j)$

```
In [16]: print("::::::::::::Rock-Paper-Scissor::::::::::::\n\n")
print("1 for ROCK\n2 for PAPER\n3 for SCISSOR\n")
player1 = int(input("Player1 :: Enter your move: "))
player2 = int(input("Player2 :: Enter your move: "))

if player1 == player2 :
    print("tie")
elif player1 == 1 and player2 == 2 or player1 == 2 and player2 == 3 or player1 == 3 and player2 == 1:
    print("player 2 WINS")
elif (player1 == 1 and player2 == 3 or player1 == 2 and player2 == 1 or player1 == 3 and player2 == 2):
    print("player 1 WINS")
```

::::::::::::Rock-Paper-Scissor::::::::::::

1 for ROCK  
2 for PAPER  
3 for SCISSOR

player 2 WINS

```
In [20]: print("::::::::::::Salaries::::::::::::\n\n")

ew1 = int(input("Enter your Wages: "))
eh1 = int(input("Enter your hours: "))
ew2 = int(input("\nEnter your Wages: "))
eh2 = int(input("Enter your hours: "))
ew3 = int(input("\nEnter your Wages: "))
eh3 = int(input("Enter your hours: "))
ew4 = int(input("\nEnter your Wages: "))
eh4 = int(input("Enter your hours: "))
ew5 = int(input("\nEnter your Wages: "))
eh5 = int(input("Enter your hours: "))

print("Salaries::\n\n")
print("Employee1: ", ew1*eh1,"₹")
print("Employee2: ", ew2*eh2,"₹")
print("Employee3: ", ew3*eh3,"₹")
print("Employee4: ", ew4*eh4,"₹")
print("Employee5: ", ew5*eh5,"₹")
```

::::::::::::Salaries::::::::::::

Salaries::

Employee1: 792 ₹  
Employee2: 875 ₹  
Employee3: 1856 ₹  
Employee4: 1365 ₹  
Employee5: 768 ₹

```
In [25]: print("::::::::::::Result::::::::::::\n\n")

py = int(input("Enter marks of Python: "))
bd = int(input("Enter marks of Big data: "))
ai = int(input("Enter marks of AI: "))
ml = int(input("Enter marks of ML: "))
```

```

pro = int(input("Enter marks of prject1: "))
total = (py + bd + ai + ml + pro)
if total >= 500 :
    print("Incorrect Data")
else :
    per = total *100 / 500

    print("Percetage : ",per,"\n")

    if per <= 100 :
        if(per <= 100 and per > 85) :
            print("Grade: A\nPerc: ",per,"\nPASS")
        elif(per <= 85 and per > 70) :
            print("Grade: B\nPerc: ",per,"\nPASS")
        elif(per <= 70 and per > 55) :
            print("Grade: C\nPerc: ",per,"\nPASS")
        elif(per <= 55 and per > 40) :
            print("Grade: D\nPerc: ",per,"\nPASS")
        elif(per <= 40 and per >= 33) :
            print("Grade: E\nPerc: ",per,"\nPASS")
        elif(per < 33) :
            print("Grade: --\nPerc: ",per,"\nFAIL")
    else :
        print("::Invalid Percentage::")

```

:::::::::::::Result:::::::::::::

Percetage : 69.2

Grade: C

Perc: 69.2

PASS

In [ ]: