DAY 10 TASK.py - C:/Users/krsub/OneDrive/Desktop/internship/DAY 10 TASK.py (3.10.0)

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```
#Task 1
import os

#1. Create a folder named "Intern_Data".
os.mkdir("Intern_Data")

#2. Inside that folder, create a file named "info.txt".
with open("Intern_Data/info.txt","w") as f:
    #3. Write your Name and Course inside the file.
    f.write("Name: Subrahmanya K R\n")
    f.write("Course: AIML")

#4. Check whether the file exists or not.
print(os.path.exists("Intern_Data/info.txt"))

#5. Display the current working directory.
print(os.getcwd())

#6. List all files inside the "Intern_Data" folder.
print(os.listdir("Intern_Data"))

#7. Display the operating system type.
print("OS Type:", os.name)

#8. Rename the file from info.txt to student_info.txt.
os.rename("Intern_Data/info.txt","Intern_Data/student_info.txt")
print("Renamed")

print('='*60)
```

```
>>>
====== RESTART: C:/Users/krsub/OneDrive/Desktop/internship/DAY 10 TASK.py ======
True
C:\Users\krsub\OneDrive\Desktop\internship
['info.txt']
OS Type: nt
Renamed
============================================================
>>>
```

```python
#Task 2
import sys

#1. Print the script name using sys.argv.
print("Script name:", sys.argv[0])

#2. Print all command-line arguments entered.
print("Arguments list:", sys.argv[1:])

#3. Print the Python version.
print("Python version:", sys.version)

#4. Take user input using standard input.
name = input("Enter name: ")

#5. Display a welcome message using the entered name.
print("Welcome", name)

#6. Display output using standard output.
sys.stdout.write("Hello..")
print('='*60)
```

```
====== RESTART: C:/Users/krsub/OneDrive/Desktop/internship/DAY 10 TASK.py ======
Script name: C:/Users/krsub/OneDrive/Desktop/internship/DAY 10 TASK.py
Arguments list: []
Python version: 3.10.0 (tags/v3.10.0:b494f59, Oct  4 2021, 19:00:18) [MSC v.192
 64 bit (AMD64)]
Enter name: Subrahmanya KR
Welcome Subrahmanya KR
Hello..============================================================
```

```python
#Task3
import shutil

# Create source file
with open("source.txt", "w") as f:
    f.write("This is a sample file")

# Copy file
shutil.copy("source.txt", "destination.txt")

# Disk usage
total, used, free = shutil.disk_usage("/")

print("File copied successfully")
print(f"Total: {total//(1024**3)}GB")
print(f"Used: {used//(1024**3)}GB")
print(f"Free: {free//(1024**3)}GB")
```

```
====== RESTART: C:/Users/krsub/OneDrive/Desktop/internship/DAY 10 TASK.py =====
File copied successfully
Total: 475GB
Used: 434GB
Free: 40GB
```

```python
#Task4
import math

n = float(input("Enter a number: "))

print("Square root:", math.sqrt(n))
print("Factorial:", math.factorial(int(n)))
print("Floor value:", math.floor(n))
print("Ceiling value:", math.ceil(n))
```

```
====== RESTART: C:/Users/krsub/OneDrive/Desktop/internship/DAY 10 TASK.py ======
Enter a number: 17.53
Square root: 4.186884283091665
Factorial: 355687428096000
Floor value: 17
Ceiling value: 18
>>
```

```python
# Task5

import random

#1. Generate a random number between 1 and 6
dice = random.randint(1, 6)

#2. Print the dice result
print("Dice rolled:", dice)

#3. Create a list of cards
cards = ["Ace", "King", "Queen", "Jack"]

#4. Shuffle the cards
random.shuffle(cards)
print("Shuffled Cards:", cards)

#5. Pick one random card
print("Random Card:", random.choice(cards))
```

```
====== RESTART: C:/Users/krsub/OneDrive/Desktop/int
Dice rolled: 4
Shuffled Cards: ['Queen', 'Ace', 'King', 'Jack']
Random Card: Jack
>
```

```
#Task6

import statistics

#1. Create a list of student marks
marks = [74, 85, 52, 59, 96]

#2. Display marks
print("Marks:", marks)

#3. Mean
print("Mean:", statistics.mean(marks))

#4. Median
print("Median:", statistics.median(marks))

#5. Standard Deviation
print("Standard Deviation:", statistics.stdev(marks))
```

```
====== RESTART: C:/Users/krsub/OneDrive/Desktop/
Marks: [74, 85, 52, 59, 96]
Mean: 73.2
Median: 74
Standard Deviation: 18.102486017119308
>>
```

```python
import json

#1. Take input
location = input("Enter location: ")
college = input("Enter college name: ")

data = {
    "Location": location,
    "College": college
}

#2. Store data in JSON file
with open("data.json", "w") as f:
    json.dump(data, f)

#3. Read data from JSON file
with open("data.json", "r") as f:
    stored_data = json.load(f)

#4. Print stored data
print("Location:", stored_data["Location"])
print("College:", stored_data["College"])
```

```
====== RESTART: C:/Users/krsub/OneDrive/Desktop/internsh
Enter location: Manglore
Enter college name: Sahyadri college of engineering
Location: Manglore
College: Sahyadri college of engineering
```