

Write a Python program to draw a scatter plot comparing two subject marks of Mathematics and Science. Use marks of 10 students.

Sample data:

Test Data:

```
math_marks = [88, 92, 80, 89, 100, 80, 60, 100, 80, 34]
```

```
science_marks = [35, 79, 79, 48, 100, 88, 32, 45, 20, 30]
```

```
marks_range = [10, 20, 30, 40, 50, 60, 70, 80, 90, 100]
```

PROGRAM:

```
import matplotlib.pyplot as plt
```

```
# Sample Data
```

```
math_marks = [88, 92, 80, 89, 100, 80, 60, 100, 80, 34]
```

```
science_marks = [35, 79, 79, 48, 100, 88, 32, 45, 20, 30]
```

```
marks_range = [10, 20, 30, 40, 50, 60, 70, 80, 90, 100]
```

```
# Create a scatter plot
```

```
plt.scatter(math_marks, science_marks, color='blue', label='Mathematics vs Science')
```

```
# Set labels and title
```

```
plt.xlabel('Mathematics Marks')
```

```
plt.ylabel('Science Marks')
```

```
plt.title('Scatter Plot: Mathematics vs Science')
```

```
# Show a grid for better readability
```

```
plt.grid(True)
```

```
# Display marks_range on both axes for reference
```

```
plt.xticks(marks_range)
```

```
plt.yticks(marks_range)
```

```
# Show legend
```

```
plt.legend()
```

```
# Show the plot
```

```
plt.show()
```

OUTPUT:

Scatter Plot: Mathematics vs Science

