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C:\Users\NABEEL>C:\Users\NABEEL/AppData/Local\Microsoft\WindowsApps/python3.12.exe "c:\Users\NABEEL/Desktop/TRIAL\Python Programming Tasks/SPRINT2/TA
Updated Person dictionary: {'name': 'Alice', 'age': 26, 'email': 'alice@example.com'}
Banana quantity: 5
Final Fruits dictionary: {'apple': 15, 'banana': 5, 'orange': 8}
Word frequency: {'hello': 2, 'world': 1}
Merged dictionary: {'apple': 5, 'banana': 5, 'orange': 10, 'grape': 4}
Updated employee details: {'E001': {'name': 'Alice', 'department': 'HR', 'salary': 55000}, 'E002': {'name': 'Bob', 'department': 'II', 'salary': 6600
0}, 'E003': {'name': 'Charlie', 'department': 'Finance', 'salary': 60500}}
{'Bob': 92, 'David': 90, 'Alice': 85, 'Charlie': 78}
1 2 3 4 5 6 7 8 9 10
2 4 6 8 10 12 14 16 18 20
3 6 9 12 15 18 21 24 27 30
 Updated Person dictionary: {'name': 'Alice', 'age': 26, 'email': 'alice@example.com'}
 3 6 9 12 15 18 21 24 27 30
 4 8 12 16 20 24 28 32 36 40
 5 10 15 20 25 30 35 40 45 50
 7 14 21 28 35 42 49 56 63 70
 8 16 24 32 40 48 56 64 72 80
 9 18 27 36 45 54 63 72 81 90
 10 20 30 40 50 60 70 80 90 100
  Transposed Matrix: [[1, 4, 7], [2, 5, 8], [3, 6, 9]]
Transposed Mad IX. [[1, 4, 7], [2, 3, 6], Total prime numbers: 6

Spiral Order: [1, 2, 3, 6, 9, 8, 7, 4, 5]

Enter weight (kg): 74

Enter height (m): 1.82
 BMI: 22.34
 Category: Normal weight
Enter student score: 100
 Grade: A
 Status: Pass
madam is a palindrome
 apple is not a palindrome racecar is a palindrome
  level is a palindrome
 hello is not a palindrome
civic is a palindrome
 world is not a palindrome
deified is a palindrome
rotor is a palindrome
```

```
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8 16 24 32 40 48 56 64 72 80
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10 20 30 40 50 60 70 80 90 100
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 2 4 6 8 10
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 6 12 18 24 30
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 10 20 30 40 50
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 14 28 42 56 70
8 16 24 32 40 48 56 64 72 80
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C:\Users\NABEEL>
```