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Matric number: A24CS0251
Date: 17/10/2024

1. Start
2. Set sum=0
3. Read integer
4. While (integer >0)
    4.1 Number = integer %10
    4.2 sum = sum + number
    4.3 Number=number/10
5. End while
6. Print sum
7. If (sum%2==0)
    7.1 If ((sum%4==0) && (sum%5==0))
        Print " is even number & multiple of 4 and 5"
    7.2 Else if (sum%4==0)
        Print "is even number & multiple of 4"
    7.3 Else if (sum %5==0)
        Print "is even number & multiple of 5"
    7.4 Else
        Print "is even number"
8. Else
    8.1 If ((sum%4==0)&&(sum%5==0))
        Print "is odd number & multiple of 4 and 5"
    8.2 Else if (sum%4==0)
        Print "is odd number & multiple of 4"
    8.3 Else if (sum%5==0)
        Print "is odd number &multiple of 5"
    8.4 Else
        Print "is odd number"

9. End if
10. End

```
                    ┌─────────┐
                    │  Start  │
                    └────┬────┘
                         │
                    ┌────▼────┐
                    │ Set sum=0│
                    └────┬────┘
                         │
                   ┌─────▼──────┐
                   │Read integer│
                   └─────┬──────┘
                         │
              No    ┌────▼─────┐
         ◄──────────│Integer >0│
                    └────┬─────┘
                       Yes│
```

Decision / Process	Label
Start	Start
Process	Set sum=0
Input	Read integer
Decision	Integer >0
Process	Number =integer%10
Process	sum=sum+number
Process	Number =number/10
Output	Print sum
Decision	Sum%2==0
Decision	Sum%4==0&&sum%5==0
Output	Print "is even number &multiple of 4 and 5
Decision	Sum%4==0
Output	Print "is even number &multiple of 4"
Decision	Sum%5==0
Output	Print "is even number &multiple of 5"
Output	Print "is even number"
Decision	Sum%4==0&&sum%5==0
Output	Print "is odd number & multiple of 4 and 5"
Decision	Sum%4==0
Output	Print "is odd number & multiple of 4"
Decision	Sum%5==0
Output	Print "is odd number &multiple of 5"
Output	Print "is odd number "
End	End

Flow connections and labels:

- Start → Set sum=0 → Read integer → Integer >0
- Integer >0 — Yes → Number =integer%10 → sum=sum+number → Number =number/10 → (loop back to Integer >0)
- Integer >0 — No → Print sum → Sum%2==0
- Sum%2==0 — Yes → Sum%4==0&&sum%5==0
  - Yes → Print "is even number &multiple of 4 and 5
  - No → Sum%4==0
    - Yes → Print "is even number &multiple of 4"
    - No → Sum%5==0
      - Yes → Print "is even number &multiple of 5"
      - No → Print "is even number"
- Sum%2==0 — No → Sum%4==0&&sum%5==0
  - Yes → Print "is odd number & multiple of 4 and 5"
  - No → Sum%4==0
    - Yes → Print "is odd number & multiple of 4"
    - No → Sum%5==0
      - Yes → Print "is odd number &multiple of 5"
      - No → Print "is odd number "
- All outputs → End