Programming, control structures

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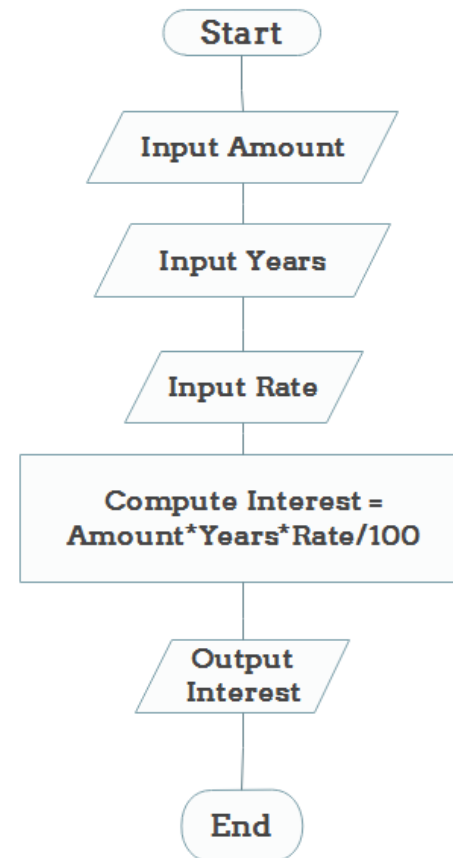
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EXECISE

FLOWCHART AND PSEUDOCODE

- Calculate the Interest of a Bank Deposit

Step 1: Read amount,
Step 2: Read years,
Step 3: Read rate,
Step 4: Calculate the interest with formula
"Interest=Amount*Years*Rate/100
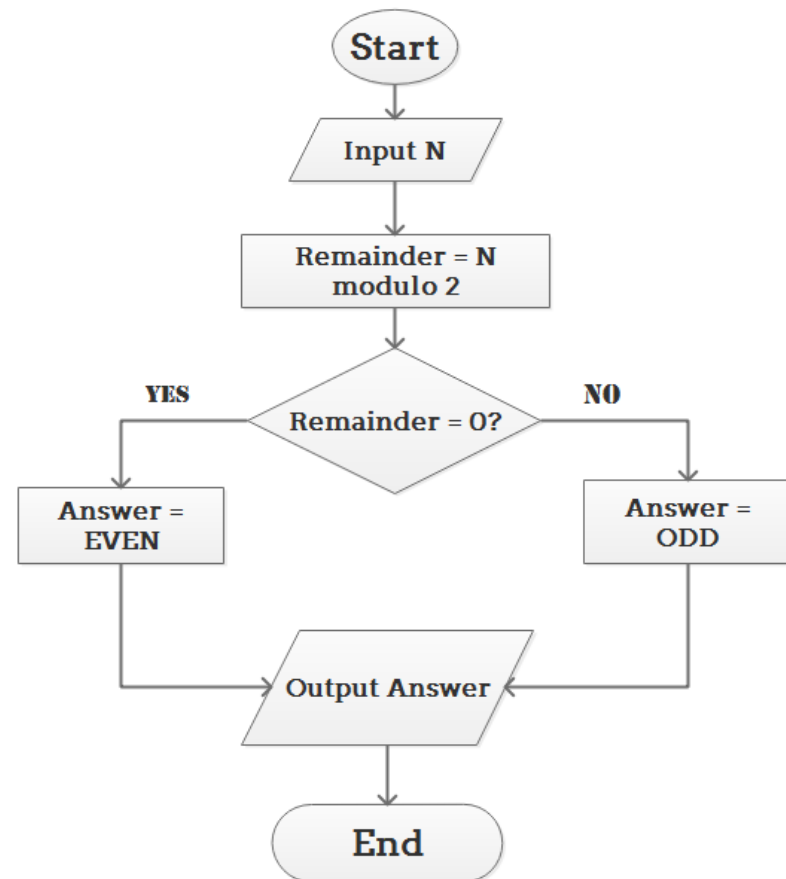Step 5: Print interest,

FLOWCHART AND PSEUDOCODE

- Calculate the Interest of a Bank Deposit

```
[redo@banquo execise_6_extra (master)]$ python deposit.py
Enter amount: 1000
Enter years: 5
Enter rate: 3.5
interest:  175.0
```

FLOWCHART AND PSEUDOCODE

- Determine and Output Whether Number N is Even or Odd

Step 1: Read number N,
Step 2: Set remainder as N modulo 2,
Step 3: If remainder is equal to 0 then
        number N is even, else number
        N is odd,
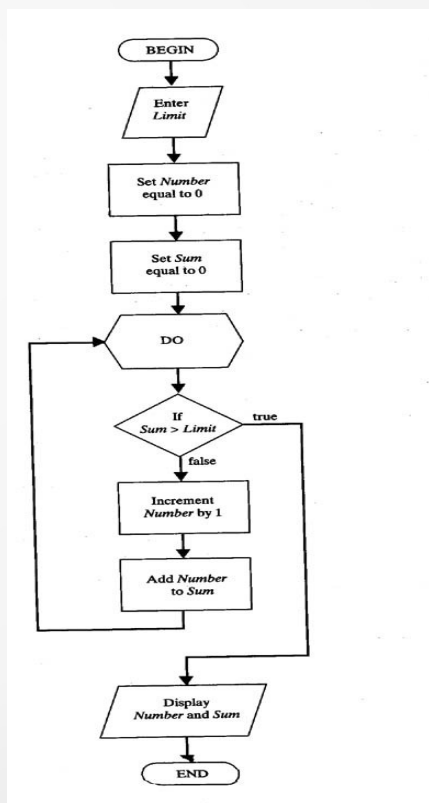Step 4: Print output.

FLOWCHART AND PSEUDOCODE

- Determine and Output Whether Number N is Even or Odd

```
[redo@banquo execise_6_extra (master)]$ python evenodd.py
Enter number: 125
125  is odd
```

FLOWCHART AND PSEUDOCODE

- For a given value, Limit, what is the smallest positive integer **Number** for which the sum Sum = 1 + 2 + ... + Number **is greater than Limit. What is the value for this Sum?**

1. Enter Limit
2. Set Number = 0.
3. Set Sum = 0.
4. Repeat the following:
   a. If Sum > Limit, terminate the repitition, otherwise.
   b. Increment Number by one.
   c. Add Number to Sum and set equal to Sum.
5. Print Number and Sum.

FLOWCHART AND PSEUDOCODE

- An infinite loop in python:

```
while True:
    pass
```

FLOWCHART AND PSEUDOCODE

- For a given value, Limit, what is the smallest positive integer **Number** for which the sum Sum = 1 + 2 + ... + Number **is greater than Limit. What is the value for this Sum?**

```
[redo@banquo execise_6_extra (master)]$ python limit.py
Enter limit value: 1250
50   and sum   1275
```