Quote of the day:
" Push yourself because no one else is going
to do it for you."

PAGE No
DATE   / /

Flow of Program

Flowcharts: Visualize taught process / Process or workflow.

Start / Stop ⟶ (Oval)

Input / Output ⟶ (Parallelogram)

Processing ⟶ (Rectangle)

Condition ⟶ (Diamond / Rhombus)

Flow direction of prgm ⟶ ⟶ (Arrow)

Q. Take a name and output Hello Name

Soln:

START
↓
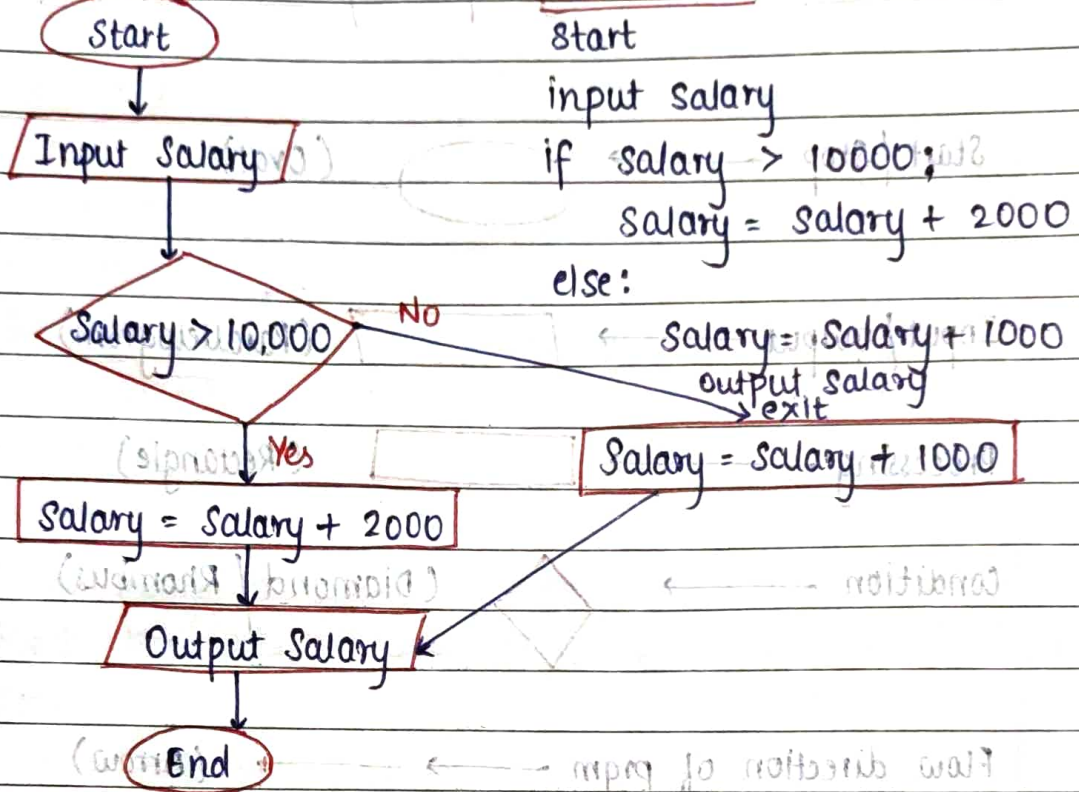INPUT Name
↓
OUTPUT Hello {Name}
↓
END

Q. Take input of a salary. If the salary if greater than 10,000 add bonus as 2000, otherwise add bonus as 1000.

Soln:

Pseudocode:

```
Start
input salary
if salary > 10000;
    salary = salary + 2000
else:
    salary = salary + 1000
output salary
exit
```
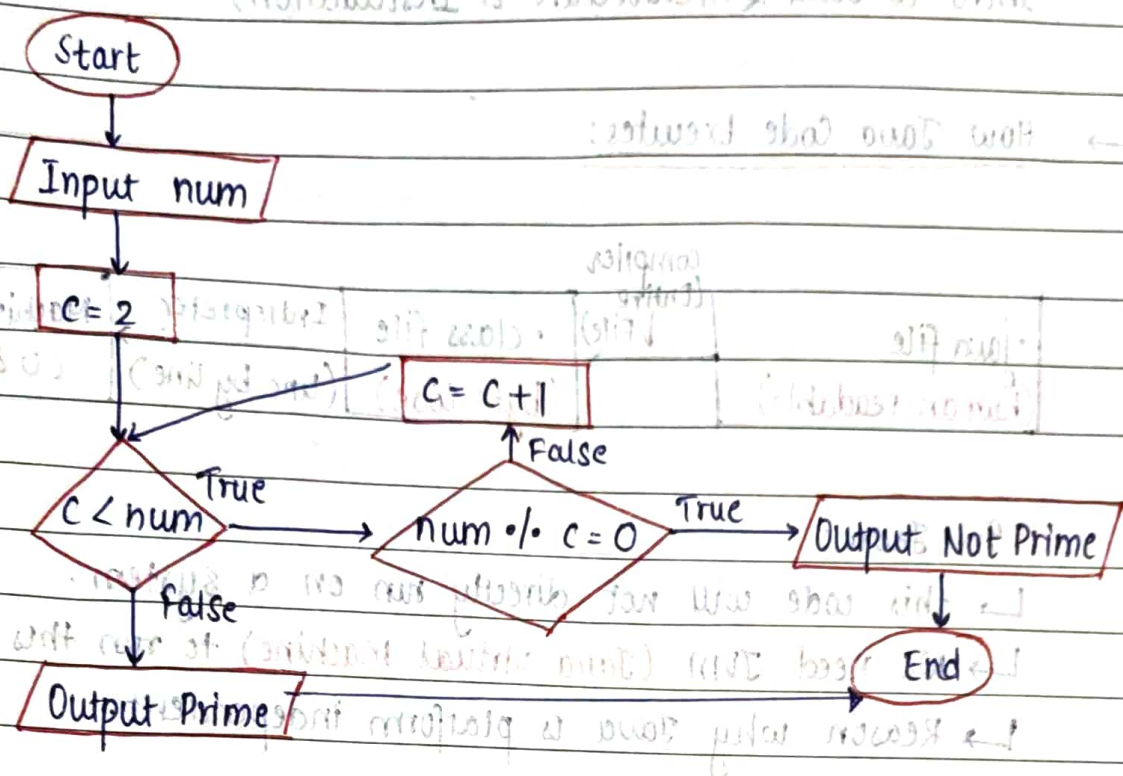

Q. Input a number and print whether it is prime or not.

Soln: (No. divisible by 1 and the no. itself is called Prime No.)

Example: 3 $\begin{cases} 3/1 = 3 \\ 3/3 = 1 \end{cases}$ // It's a prime no. (only 1 factor)

2, 5, 7, 11, 13, 17 are also prime nos.

Example: 12 $\begin{cases} 12/1 = 12 \\ 12/2 = 6 \\ 12/3 = 4 \\ 12/4 = 3 \\ 12/6 = 2 \\ 12/12 = 1 \end{cases}$ (more than 2 factors)

// It's a composite no.

4, 6, 8, 9, 10, 12, 14, 15, 16, 18 & 20 are also composite nos.

```
        ┌─────────┐
        │  Start  │
        └─────────┘
             │
             ▼
    ┌──────────────────┐
    │   Input  num     │
    └──────────────────┘
             │
             ▼
    ┌──────────┐          ┌──────────┐
    │  C = 2   │          │ C = C+1  │
    └──────────┘          └──────────┘
             │                 ↑ False
             ▼                 │
        ◇ C < num ◇──True──→◇ num °/° C = 0 ◇──True──→ ┌──────────────────┐
                                                        │ Output Not Prime │
             │ False              │ False               └──────────────────┘
             ▼                                                   │
    ┌──────────────┐                                             ▼
    │ Output Prime │                                          ( End )
    └──────────────┘
```

Pseudocode (Representation of the code, textbased)

Pseudocode for above flowchart:

```
start
input num
c = 2
while c < num:
    if num°/°c = 0:
        output "not prime"
        exit
    c = c+1
end while
output "prime"
exit
```