

c-programming

1) check whether a positive integer is prime or not.

Algorithm :- Prime(n)

step-1:- Read n

step-2:- If $n=1$ then

3:- write "non prime"

4:- Else

5:- $f=1$

6:- For $k=2$ to $n/2$ do

7:- If $n\%k=0$ then

8:- $f=0$

9:- Endif

10:- Endfor

11:- If $f=1$ then

12:- write "prime no."

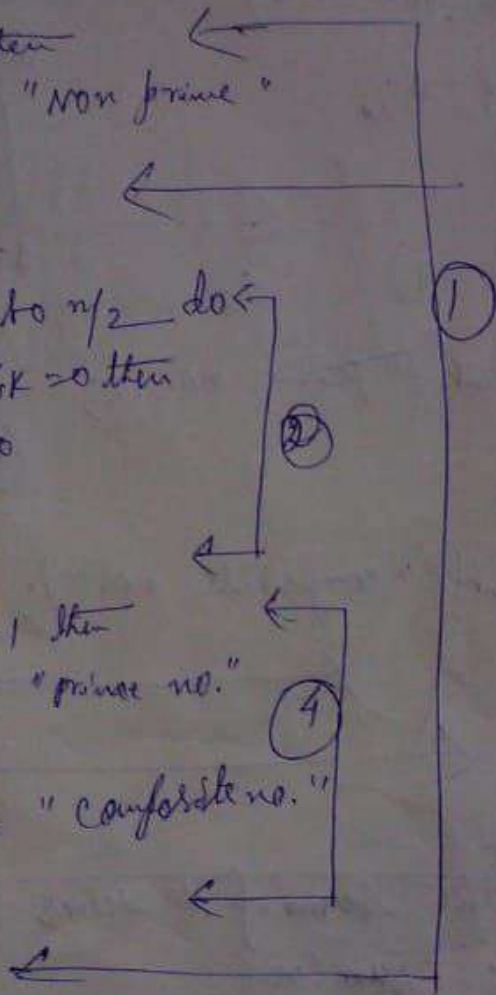
13:- Else

14:- write "composite no."

15:- Endif

16:- End

17:- End



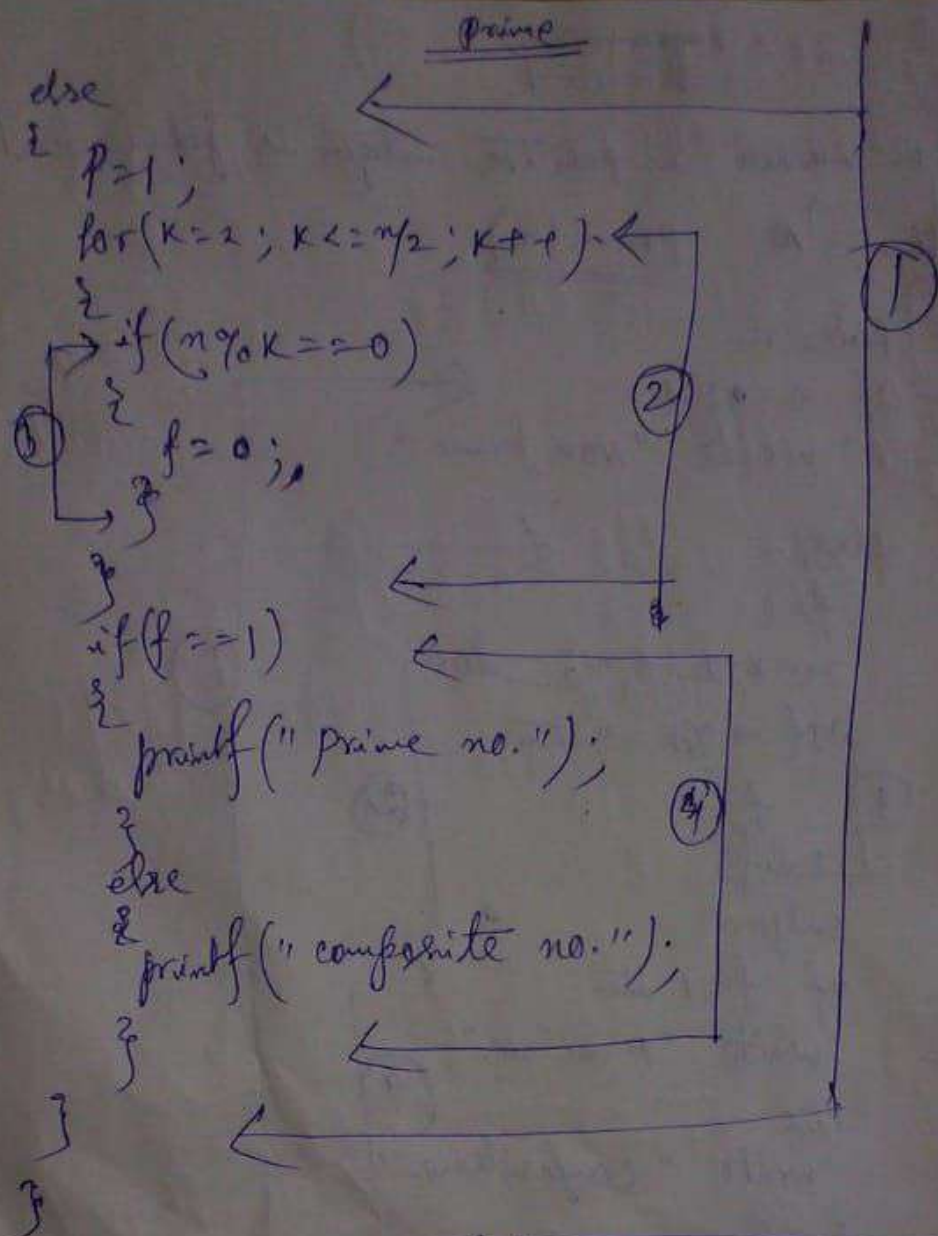
c-program

```
#include <stdio.h>
```

```
void main()
```

```
{
    int n, k, f;
    printf("Enter a positive integer ");
    scanf("%d", &n);
    if (n==1)
        printf("non prime no.");
}
```

1



2) Find the sum of the series $S = 1 + 2 + 3 + \dots + N$

Algorithm :- Sum(n)

- 1 :- Read n
- 2 :- $S = 0$
- 3 :- For $k=1$ to n do
- 4 :- $S = S + k$
- 5 :- Endfor
- 6 :- write S
- 7 :- End

② C-program

```
#include <stdio.h>
```

```
void main()
```

```
{ int n, k, s ;  
  printf("Enter a natural no.");
```

```
scanf("%d", &n);
```

```
s=0;
```

```
for(k=1; k<=n; k++)
```

```
{
```

```
  s=s+k;
```

```
}
```

```
printf("%d", s);
```

```
}
```