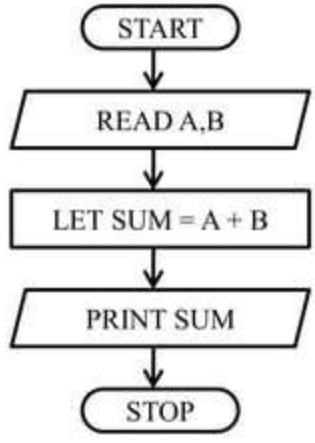
PYTHON PROGRAMMING

ADDITION OF TWO NUMBERS

Algorithm

1. START
2. READ A,B
3. LET SUM = A + B
4. PRINT SUM
5. STOP

Flow chart



Python program

```
# Sum of two numbers
a=input ('Enter first number')
b=input ('Enter second number')
sum=a+b
print ('Sum of given numbers =',sum)
```

Output

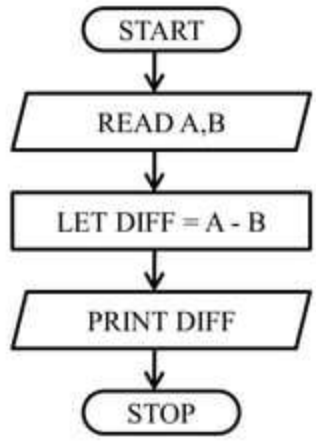
```
Enter first number10
Enter second number8
('Sum of given numbers =', 18)
```

SUBSTRACTION OF TWO NUMBERS

Algorithm

1. START
2. READ A, B
3. LET DIFF = A - B
4. PRINT DIFF
5. STOP

Flow chart



Python program

```
# Difference between two numbers
a=input ('Enter first number')
b=input ('Enter second number')
diff=a-b
print ('Difference of given numbers =',diff)
```

Output

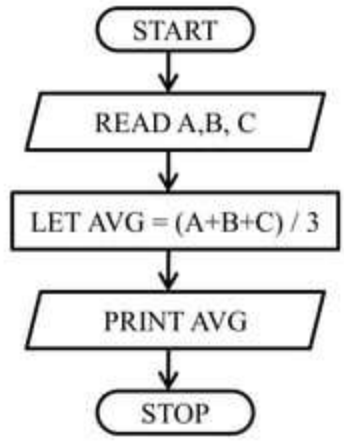
```
Enter first number10
Enter second number5
('Difference of given numbers =', 5)
```

AVERAGE OF THREE NUMBERS

Algorithm

1. START
2. READ A, B, C
3. LET AVG = (A+B+C) / 3
4. PRINT AVG
5. STOP

Flow chart



Python program

```
# Average of three numbers
a=input ('Enter first number')
b=input ('Enter second number')
C=input ('Enter third number')
avg=(a+b+c)/3
print ('Average of three numbers =',avg)
```

Output

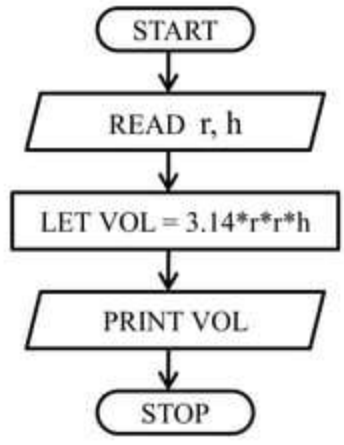
```
Enter first number10
Enter second number5
Enter third number15
('Average of three numbers =',10)
```

VOLUME OF CYLINDER

Algorithm

1. START
2. READ r, h
3. LET VOL = 3.14*r*r*h
4. PRINT VOL
5. STOP

Flow chart



Python program

```
# Volume of cylinder
r=input ('Enter radius')
h=input ('Enter height')
volume = 3.14*r*r*h
print ('Volume of cylinder=',volume)
```

Output

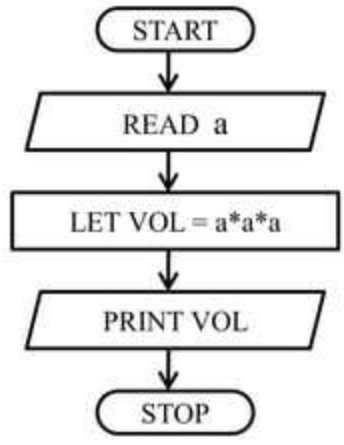
```
Enter radius5
Enter height10
('Volume of cylinder =', 785.0)
```

VOLUME OF CUBE

Algorithm

1. START
2. READ a
3. LET VOL = a*a*a
4. PRINT VOL
5. STOP

Flow chart



Python program

```
# Volume of cube
a=input ('Enter one side of cube')
volume = a*a*a
print ('Volume of cube=',volume)
```

Output

```
Enter one side of cube5
('Volume of cube =', 125.0)
```

CONVERSION OF CELSIUS TO FAHRENHEIT

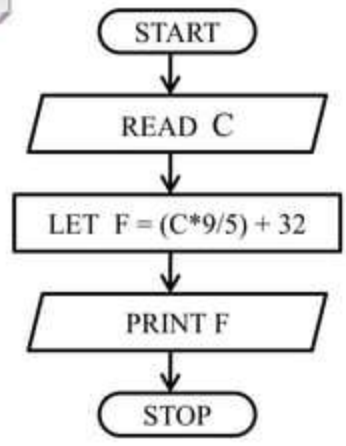
°C = (°F − 32) x 5/9

°F = (°C x 9/5) + 32

Algorithm

1. START
2. READ C
3. LET F = (C*9/5) + 32
4. PRINT F
5. STOP

Flow chart



Python program

```
# Convert Celsius to Fahrenheit
c=input ('Enter heat in degree Celsius')
f=(c*9/5)+32
print ('Heat in Fahrenheit scale =',f)
```

Output

```
Enter heat in degree Celsius37
('Heat in Fahrenheit scale =',98)
```

CONVERSION OF FAHRENHEIT TO CELSIUS

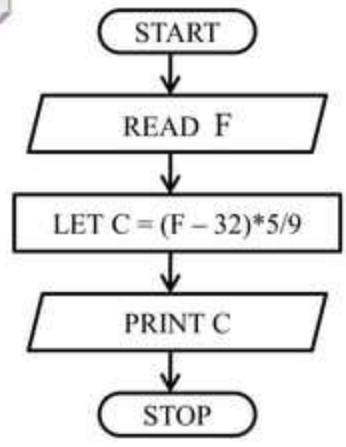
°C = (°F − 32) x 5/9

°F = (°C x 9/5) + 32

Algorithm

1. START
2. READ F
3. LET C = (F – 32)*5/9
4. PRINT C
5. STOP

Flow chart



Python program

```
# Convert Fahrenheit to Celsius
f=input ('Enter heat in Fahrenheit')
c=(f-32)*5/9
print ('Heat in Celsius scale =',c)
```

Output

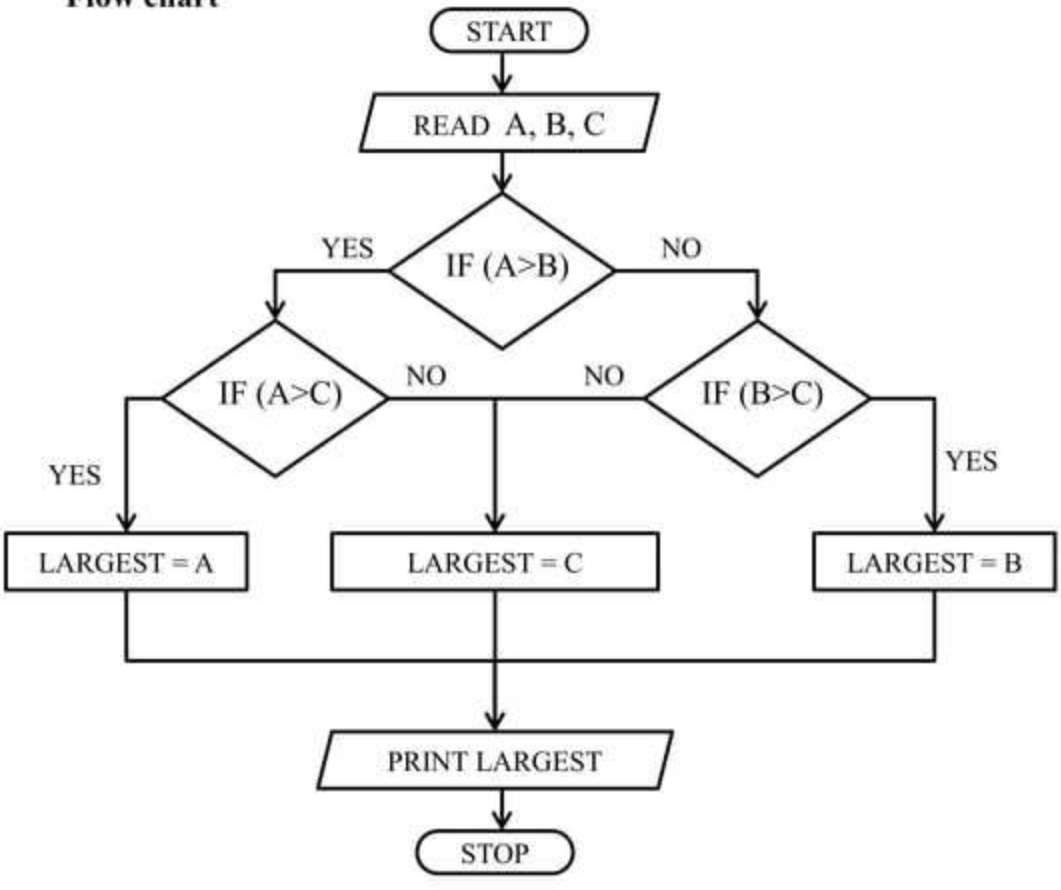
```
Enter heat in Fahrenheit98
('Heat in Celsius scale =',37)
```

LARGEST OF THREE NUMBERS

Algorithm

1. START
2. READ A, B, C
3. IF (A>B):
   IF (A>C):
   LARGEST=A
   ELSE:
   LARGEST=C
   ELSE:
   IF (B>C):
   LARGEST=B
   ELSE :
   LARGEST=C
4. PRINT LARGEST
5. STOP

Flow chart



Python program

```
# Largest of three numbers
a=input ('Enter first number')
b=input ('Enter second number')
c=input ('Enter third number')
if (a>b):
    if (a>c):
        largest=a
    else:
        largest=b
else:
    if (b>c):
        largest=b
    else:
        largest=c
print ('Largest of three numbers is',largest)
```

Output

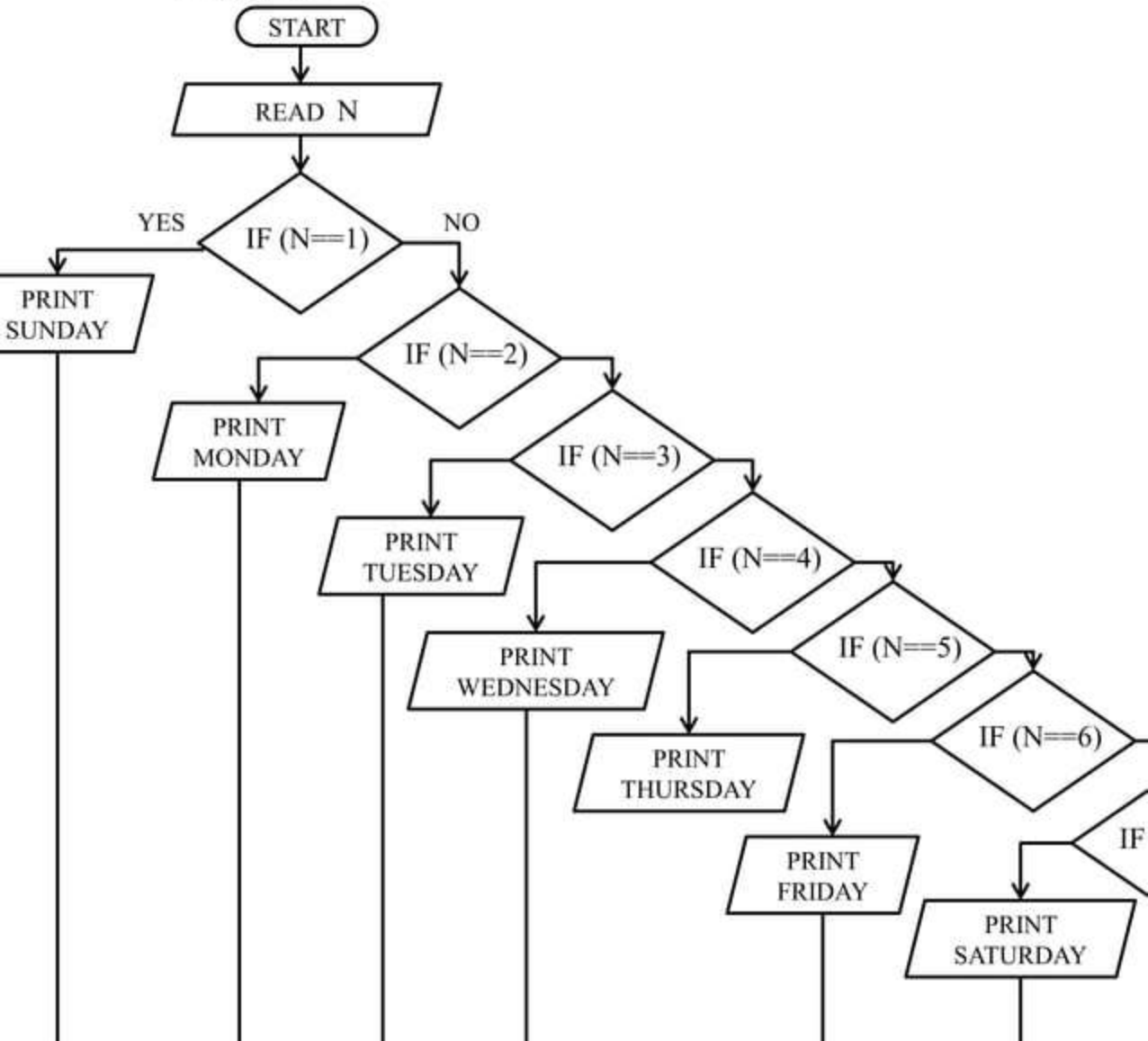
```
Enter first number 5
Enter second number 6
Enter third number 88
('Largest of three numbers is', 88)
```

CHARACTER NAME OF THE DAY

Algorithm

1. START
2. READ N
3. IF (N==1): PRINT SUNDAY
   ELIF (N==2): PRINT MONDAY
   ELIF (N==3): PRINT TUESDAY
   ELIF (N==4): PRINT WEDNESDAY
   ELIF (N==5): PRINT THURSDAY
   ELIF (N==6): PRINT FRIDAY
   ELIF (N==7): PRINT SATURDAY
   ELSE: PRINT INVALID DAY NUMBER
4. STOP

Flow chart



CHARACTER NAME OF THE DAY

Algorithm

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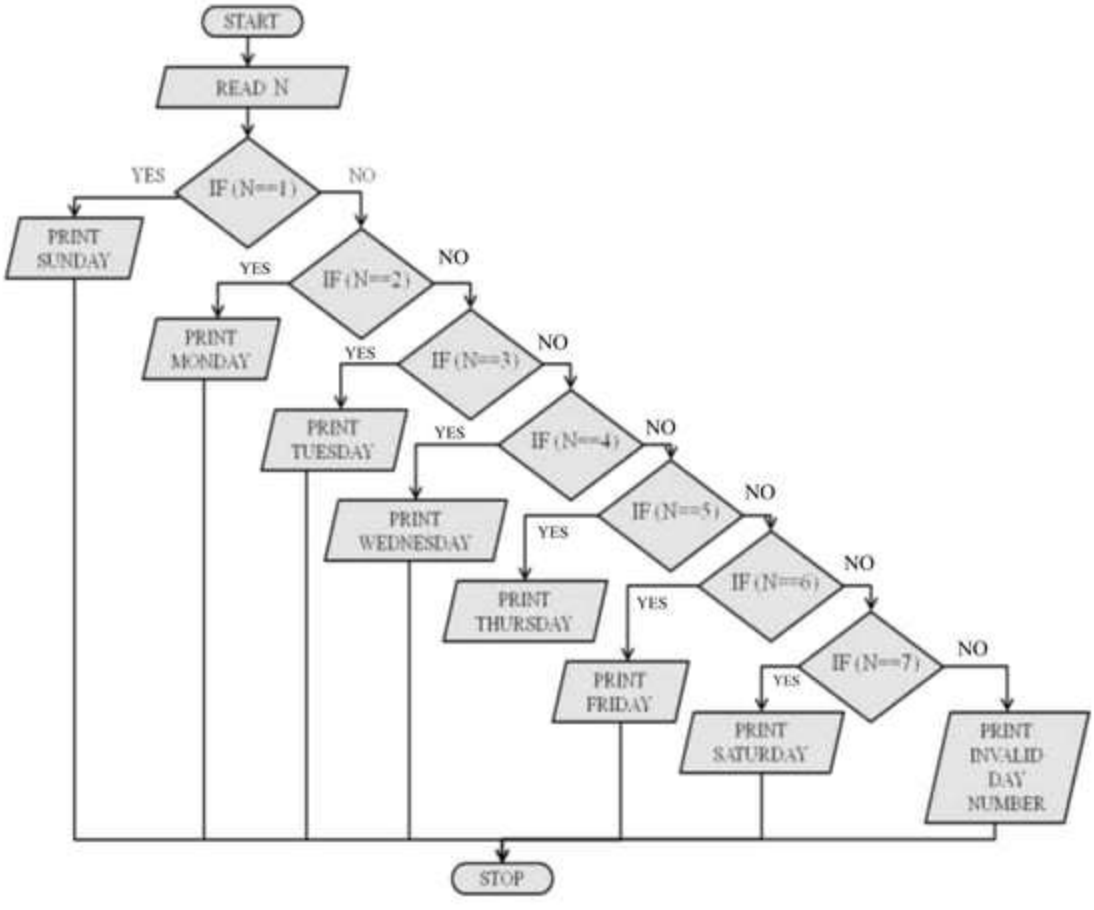
   ELIF (N==4): PRINT WEDNESDAY
   ELIF (N==5): PRINT THURSDAY
   ELIF (N==6): PRINT FRIDAY
   ELIF (N==7): PRINT SATURDAY
   ELSE: PRINT INVALID DAY NUMBER
4. STOP

Flow chart



Python program

```
# Character name of the day
n=input('Enter the day number')
if (n==1):
    print ('Sunday')
elif (n==2):
    print ('Monday')
elif (n==3):
    print ('Tuesday')
elif (n==4):
    print ('Wednesday')
elif (n==5):
    print ('Thursday')
elif (n==6):
    print ('Friday')
elif (n==7):
    print ('Saturday')
else:
    print ('Not a valid day number')
```

Output

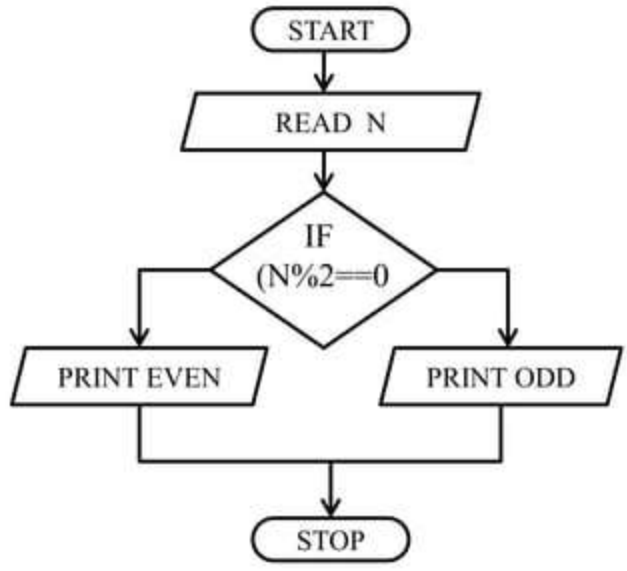
```
Enter the day number2
Monday
```

ODD OR EVEN

Algorithm

1. START
2. READ N
3. IF (N%2 == 0):
   PRINT EVEN
   ELSE
   PRINT ODD
4. STOP

Flow chart



Python program

```
# To find given number is odd or even number
n=input ('Enter number')
if (n%2==0):
        print ('Even number')
else:
        print ('Odd number')
```

Output

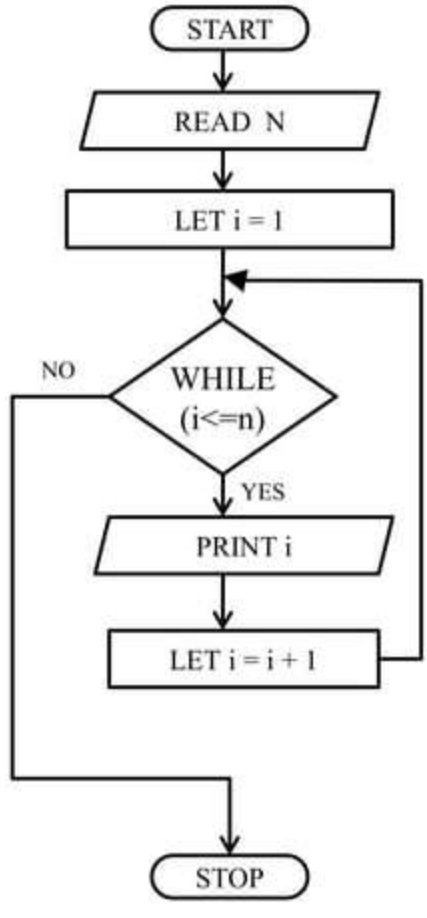
```
Enter nuber5
Odd number
```

TO PRINT N NATURAL NUMBERS

Algorithm

1. START
2. READ N
3. LET i=1
4. WHILE (i <= N):
   PRINT i
   LET I = i+1
5. STOP

Flow chart



Python program

```
# To print N natural numbers
n=input ('Enter Limit')
i=1
While (i<=n):
        print i
        i = i+1
```

Output

```
Enter Limit3
1
2
3
```

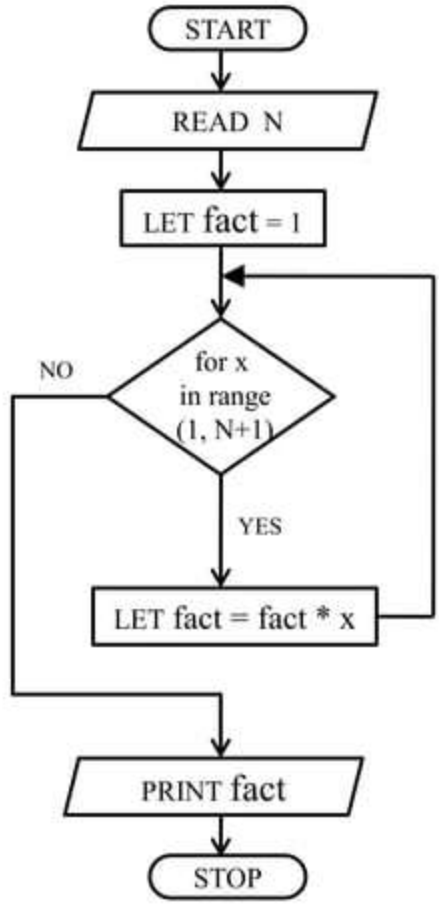
FACTORIAL OF A NUMBER

Algorithm

1. START
2. READ N
3. LET fact =1
4. FOR x IN RANGE (1, N+1):

   fact = fact * x
5. PRINT fact
6. STOP

Flow chart



Python program

```
# To print factorial of a number
n=input ('Enter number')
fact=1
For x in range (1, n+1):
        fact=fact*x
Print ('Factorial of given number is', fact)
```

Output

```
Enter number5
Factorial of given number is 120
```