

TASK :-  
DATE:  
19/1/2023

# PYTHON FUNCTIONS

E.I.

AIMS:-

A train has 100 seats. Write a function that checks if a booking is possible given seats left and tickets requested.

ALGORITHMS:-

- 1, Start
- 2, Input seats\_left (number of seats available)
- 3, Input tickets\_requested (number of tickets a passenger wants)
- 4, If tickets\_requested <= seats\_left:
  - Booking is possible
  - Update seats\_left = seats\_left - tickets\_requested.
  - Display "Booking successful" and show updated seats.
- 5, Else
  - Display "Not enough seats available"
- 6, End.

O/P:-

booking successful !! seats left : 15  
not enough seats available

## PROGRAMS:-

```

def book_tickets(seats_left, tickets_requested):
    if tickets_requested <= seats_left:
        return f"Booking successful! Seats left: {seats_left - tickets_requested}"
    else:
        return "Not enough seats available."

```

Point (book-ticket) (20, 5))

Print (book\_tickets(3, 5))

1	AE/TECH					EX-16
2						RELEASER-AIRCRAFT
3						RESULTANT-GOALS
4						MAX-HOCE (6)
5						RECORDS (2)
6						DATA (18)
7						MANUALS-GATE

E-2

A/Q:-

Write a function that finds the student with the highest marks.

ALGORITHMS:-

- 1) Start
- 2) Input a dictionary / list of students with their marks
- 3) Compare marks of all students.
- 4) Identify the student with the maximum marks.
- 5) Display the name of that student.
- 6) End.

O/P:-

Neena

## PROGRAM :-

def top\_student(marks) :

return max(marks, key = marks.get)

Student = { "Arun": 85, "Meera": 92, "Kumar": 78 }

print (top\_student(Student))

above code is working fine  
it is returning best student name  
(Armen response)  
so it is  $\Rightarrow$  temporary variable  
is being in process.  
for loop = for loop statement  
with temporary variable  
"Meera" value  
then break

now answer will be Meera.

if we run this program again  
it will give different output

F.B:

Aims:-

Write a function that calculates an ATM withdrawal and returns the new balance or an error message.

Algorithm:-

- 1) Start
- 2) Input balance (current account balance)
- 3) Input amount (withdrawal amount).
- 4, If amount  $\leq$  balance:
  - Deduct amount from balance

$$\Rightarrow \text{balance} = \text{balance} - \text{amount}$$

5, Else:

- Display "withdrawal successful"

and show new balance.

- Display "Insufficient funds".

6 End

O/P

withdrawal successful ! new balance : (5000, 2000)  
Insufficient funds.

VELTECH	
EX No.	7
PERFORMANCE (5)	5
RESULT AND ANALYSIS (5)	5
VIVA VOCE (5)	5
RECORD (5)	5
TOTAL (20)	20
N WITH DATE	Feb 2022

RESULT:-

Thus the Python program using  
Python functions has been compiled and ex-  
ecuted successfully.

### Program:-

```
def atm-withdraw (balance, amount) :  
    if amount <= balance:  
        return f"withdrawal successful! New  
        Balance : {balance - amount}"  
    else:  
        return "Insufficient funds"  
  
print(atm-withdraw(5000, 2000))  
Successful! New Balance : 3000  
print(atm-withdraw(3000, 5000))
```