

## SESSION - 1 REVISION OF PYTHON LEVEL 1



#### **Learning Outcomes:**

- Remember: The students will recall about variables, conditions, loops and lists.
- Understand: They will focus on understanding the above concepts.
- Apply: They will learn to apply the concepts of variables, conditions, loops and lists in multiple programs
- Analyze: They will check their understanding by developing a code.
- Create: They will create the code in EduBlocks



# Apply & Create

#### TASK 01:-

</> WRITE A PROGRAM TO ASK HOW MANY STUDENTS ARE GOING TO ENTER THEIR MARKS FOR THE SUBJECT AND COMPARE THEIR GRADES

### **Activity Description**



#### **Using FOR Loop:-**

- 1.Create 2 variables:
  - a.Number = number of students
  - b.Marks= marks of the student
- 2.Run a for loop for total number of students
- 3. Compare the marks, and display grades.





```
NUMBER = int( input( "How many students in the class are going to enter their marks")
for i ▼ in range( ① NUMBER ▼ ):
  MARKS ▼ = ▼ int( ⊕ input( "Enter your marks")
     MARKS ▼
  print( "Grade C"
      MARKS ▼ > ▼ 30 and ▼
                              MARKS ▼ <= ▼ (60)
  print( "Grade B")
      MARKS ▼  > ▼ 60 and ▼
                              print( "Grade A"
```

```
elif MARKS > > 60 and > MARKS > <= > 100 :

print( "Grade A" ) 
else:

print( "Invalid marks" )
```

## Syntax



```
#Start code here
    NUMBER = int(input("How many students in the class are going to enter their marks"))
3 , for i in range(NUMBER):
      MARKS = int(input("Enter your marks"))
      if MARKS > 0 and MARKS <= 30:
        print("Grade C")
      elif MARKS > 30 and MARKS <= 60:
        print("Grade B")
      elif MARKS > 60 and MARKS <= 100:
        print("Grade A")
      else:
        print("Invalid marks")
13
```





```
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How many students in the class are going to enter their marks 4

Enter your marks 50

Grade B

Enter your marks 60

Grade B

Enter your marks 70

Grade A

Enter your marks 120

Invalid marks
```



# Apply & Create

#### TASK 02:-

## </> WRITE ABOVE PROGRAM USING WHILE LOOP





```
COUNT ▼ = ▼ (0)
NUMBER = int( input( "How many students in the class are going to enter their marks"
      COUNT *
                      NUMBER ▼
 MARKS = = int( input( Enter your marks
              ▶ ▼ (0)
     MARKS *
                        and ▼
                                 MARKS *
                                                 30
  print( "Grade C")
                > 7 (30) and 7
      MARKS -
                                  MARKS -
                                             <= ▼ (60)
elif
  print( "Grade B"
```



#### **Program**

```
<= ▼ (100)
elif
      MARKS *
                          and 💌
                                   MARKS *
 print( "Grade A")
      MARKS *
                > 7 (100)
                          and ▼
                                    MARKS *
                                               <= ▼ (0):
       "Invalid marks"
 print(
COUNT ▼ += ▼ 1
    "Thank you"
```

### **Syntax**



```
#Start code here
    COUNT = 0
    NUMBER = int(input("How many students in the class are going to enter their marks"))
 4 v while COUNT < NUMBER:
      MARKS = int(input("Enter your marks"))
      if MARKS > 0 and MARKS <= 30:
        print("Grade C")
      elif MARKS > 30 and MARKS <= 60:
        print("Grade B")
      elif MARKS > 60 and MARKS <= 100:
11
        print("Grade A")
12 <sub>v</sub>
      elif MARKS > 100 and MARKS <= 0:
13
        print("Invalid marks")
      COUNT += 1
    print("Thank you")
```



# Apply & Create

#### TASK 03:-

</> WRITE A PROGRAM TO ENTER 10 STUDENT DATA-NAME, GRADES FOR MATH SUBJECT SAVE THE DATA FOR FURTHER ANALYSIS



#### **Program**

```
# Start code here
Grades ▼ = ▼ [ ① □ ]
for i ▼ in range( ① 10 ):
 Names ▼ = ▼ input( "Enter your name"
 Names ▼ . append ▼ ( Names ▼
 Marks ▼ = ▼ int( ① input( "Enter your marks")
 Grades ▼ . append ▼ ( Marks ▼
print( Names *
print( Marks ▼
```





```
Students = [""]
    Grades = [""]
 4_{v} for i in range(10):
      Names = input("Enter your name")
      Names.append(Names)
      Marks = int(input("Enter your marks"))
     Grades.append(Marks)
    print(Names)
    print(Marks)
11
```



### **ACTIVITY SHEETS**

## Question 1: What is variable?



- A. To store value
- B. To Fix value
- C. To change value
- D. None of the above

## Question 2: What is Loop?



- A. To run code number of time
- B. To Change code number of time
- C. To Store code number of time
- D. None of the above

#### Question 3:

Which of the following is the correct instruction to store new data in the list?

- A. append
- B. insert
- C. extend
- D. add.last



#### Question 4:

What are different types of operators?



- A. Assignment operator
- B. Arithmetic operator
- C. less than
- D. greater than

## Question 5: What is the difference between AND and OR operators, to get true output?



- A. both condition true in AND
- B. both condition true in OR
- C. both condition false in AND
- D. both condition false in OR

