PRACTICAL 1

AIM:

THE AIM OF THIS PRACTICAL IS TO EXCHANGE THE VALUES OF VARIABLES BY CREATIN THE THIRD VARIABLE, ADITION n SUBSTRACTION & MULTIPLE AND DIVISION

FIRST METHOD:

THE USE OF THIRD VARIABLE

ALGORITH:

Step 1: Start
Step 2: Input two numbers from the user and store them in variables `X` and `Y`
Step 3: Display the original values of `X` and `Y`
Step 4: Create a third variable `temp`
Step 5: Assign the value of `X` to `temp` → `temp = X`
Step 6: Assign the value of `Y` to `X` → `X = Y`
Step 7: Assign the value of `temp` to `Y` → `Y = temp`
Step 8: Display the swapped values of `X` and `Y`
Step 9: Stop

CODE:

```
X = int(input("ENTER THE VALUE:"))

Y = int(input("ENTER THE VALUE:"))

#create a temp variable and swap values

Temp = x

X = y

Temp = y

Print("SWAP BY 3rd VARIABLE")

Print("x=",x)

Print("y=",y)
```

SECOND METHOD:

THE USE OF ADDITION AND SUBSTRACTION

ALGORITHM:

Step 1: Start

Step 2: Input two numbers from the user and store them in variables `x` and `y`

Step 3: Display the original values of `x` and `y`

Step 4: Perform the following steps to swap the values:

- `x = x + y`
- `y = x - y`
- `x = x - y`

Step 5: Display the swapped values of `x` and `y`

Step 6: Stop

CODE:

```
X = int(input("ENTER THE VALUE:"))
Y = int(input("ENTER THE VALUE:"))
# BY USING ADDITION and SUBSTRACTION
X = x + y
Y = x – y
X = x – y
Print("SWAP BY ADDITION n SUBSTRACTION")
Print("x=",x)
Print("y=",y)
```

THIRD METHOD:

THE USE OF MULTIPLICATION N DIVISION

ALGORITHM:

Step 1: Start

Step 2: Input two numbers from the user and store them in variables `x` and `y`

Step 3: Display the original values of `x` and `y`

Step 4: Perform the following steps to swap the values:

- `x = x * y`
- `y = x / y`
- `x = x / y`

Step 5: Display the swapped values of `x` and `y`

Step 6: Stop

CODE:

```
X = int(input("ENTER THE VALUE:"))

Y = int(input("ENTER THE VALUE:"))

# BY USING MULTIPLICATION N DIVISION

X = x*y

Y = x/y

X= x/y

Print("SWAP BY MULTIPLICATION n DIVISON")

Print("x=",x)

Print("y=",y)
```

THE OUTPUT OF WHOLE CODE IS:

```
PS E:\CSE VIT> & "C:\Users\ATLAS - PC\AppData\Local\Programs\Python\Python313\python.exe" "e:/CSE VIT/project 1.py"
ENTER THE VALUE:33
ENTER THE VALUE:21
SWAP BY 3rd VARIABLE
x= 21
y= 21
SWAP BY MULTIPLE ASSIGNMENT
x= 21
y= 21
SWAP BY ADDITION n SUBSTRACTION
x= 21
y= 21
SWAP BY multiple n div.
x= 21.0
y= 21.0
```