**Our Smython syntax:**

**Arithmetic and logic operations:**

**Add:** adding two numbers or more

Examples:

X=5, y=3, z=4

T= add(x,y,z) // T=12

Q= x+y+z // Q=12

**Sub:** subbing of a value

Examples:

X=5, y=3, z=1

T=sub(x,y,z) //T=1

Q=x-y-z //Q=1

**Mul:**

Examples:

X=4, y=2

T=mul(x,y) //T=8

Q=X\*y //Q=8

W=mul(2,3,4) //W=24

**Div:**

Examples:

X=4, y=2

T=div(x,y) //T=2.0

Q=X/y //Q=2.0

W=div(2,0) //error: divide by zero

**Power:**

Examples:

X=4, y=2

T=pow(X,y) //T=4^2=16

Q=X\*\*y //Q=4^2=16

**Square root:**

X=4

T=sqrt(x) //T=2

**Or:**

Examples:

X=TRUE , Y=FALSE, Z=FALSE

T=X or Y //T=TRUE

Q=Y or Z //Q=FALSE

**And:**

Examples:

X=TRUE , Y=FALSE, Z=FALSE

T=X and Y //T=FALSE

Q=Y and Z //Q=FALSE

**Strings:**

Examples:

Name="word"

**Length**

T=len(Name) //T=4

**isUpper:**

Q= isUpper(Name) //Q=False

**isLower:**

Q= isLower(Name) //Q=True

**replace:**

Name="word"

replace\_char(Name, "w", "r") //Name="rord"

**Array:**

**Length:**

Arr=[1,3,2,5,4]

Q=len(arr) //Q=5

**Remove:** Arr.remove(Value)

Arr.remove(5) //Arr=[1,3,2,4]

**Append:**

Arr=[1,3,2,5,4]

Arr.append(6) // Arr=[1,3,2,5,4,6]

**Index:**

T=Arr[0] //T=1

**max:**

Arr=[1,3,2,5,4]

max(Arr) //5

**min:**

Arr=[1,3,2,5,4]

min(Arr) //1

**Tuples:**

**Length:**

Tupi=(2,5,4)

Num=len(Tupi) //Num=3

**Tuple+tuple:**

T1=(2,5,4)

T2=(4,6,2)

new=T1+T2 //new=(2,5,4,4,6,2)

**Index:**

T1=(2,5,4)

Num=T1[0] //Num=2

**Loops:**

**For:**

Numbers=[1,2,3]

for num in numbers:

print(num)

**For i in range():**

for i in range(5):

print(i)

**While:**

Num=5

while num<10:

Num=Num+1

**Conditions:**

**If:**

If 2>5: //FALSE

**Else:**

else: