We will see something about CPU

What are the components of CPU?

Till now we ran the things on memory unit – saving the data to variables.

Diagram

Description automatically generated

Now we will see about the arithmetic and logic unit

Diagram

Description automatically generated

Arithmetic unit deals with mathematics and logical unit deals with logic, if this do it, if it is not doesn’t do it, which means we will have a flow based on conditions.

To work with conditions we need to have an understand flowcharts and some examples of real world.

We will see IF : we can think of something like this – if it is true run this else run the second one

If True:

Print(‘I am right’)

If False:

Print(‘I am right’)

If is a block and we need to have a syntax which means we need to follow certain rules when we are using this in python. A semicolon: and indentation(certain number of spaces) – here it is normally 4 spaces

Q: what will happen with the below code snippets:

If False:

Print(‘I am right’)

Print(‘bye)

If False:

Print(‘I am right’)

Print(‘bye)

--

X =3

r = x % 2

If r == 0:

Print(‘even’)

Print(‘bye’)

Q: what do we need to do to print even?

X =3

r = x % 2

If r == 0:

Print(‘even’)

If r==1:

Print(‘odd’)

Print(‘bye’)

Do some debugging to check how this is working and find out if we can write the above program efficiently.

If it is true execute this block, else we will go for the second block which is else. Change the above code with else and work 0Now debug and see the difference where we will skip the else block and the final print statement is printed.

Q: What do you think if we can write a if statement inside of an if statement? – give a random guess

Nested if

X =3

r = x % 2

If r == 0:

Print(‘even’)

If x>5:

Print(‘it is greater than 5’)

Else:

Print(‘it is not greater than 5’)

Else:

Print(‘odd’)

Print(‘bye’)

We have something called if, elif, and else

If user says 1 then we need to print One and so on till 4

Graphical user interface, text

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How to write a program for this, debug and see how it works.? Can we use elif(else if)

Graphical user interface, text, application, chat or text message

Description automatically generated