Software :

System software

Application software

BCPL

Cobol

Fortan 77

Pascal

C 1970 : structure programming language

C+ Oops = C++ or C with classes

1980

1990 : Java as well as Python

2000 : .net : C#

2010 : JavaScript UI cloud technologies

2020 : AI, Machine learning : Python as well as R language

Web Service : Giving the service for web application when two application running using different technologies.

Micro service

Pip

Mvn

Npm

int a=10;

a=10;

int a=100;

a=”Steven”;

a=100;

a=”Ravi”;

a=True;

REPL Terminal :

Variable

int a=10; C or C++ or Java

a=20;

a = “Akash”;

var a=10; in JavaScript

let a:number =100; in typescript

a=10; in python

name=”Akash”;

result = True

a=False

differentTypeOfVariable.py

>>> id=100;

>>> name="Ravi";

>>> result = True;

>>> list =[10,20,30];

>>> set ={10,20,30};

>>> tuple=(10,20,30);

>>> dic = {id:100,name:"Ravi",age:21};

>>>print(type(id));

Multi variable declaration

>>> id,name,salary,result=100,"Steven",34000,True;

>>> print(id,name,salary,result);

100 Steven 34000 True

Same value storing in more than one variable

>>> a=b=c=100;

>>> print(a,b,c);

100 100 100

id() pre defined function which is use to find the reference code of that variable.

Mutable and immutable example

>>> empid=500;

>>> print(id(empid));

2784931300144

>>> empid=600;

>>> print(id(empid));

2784931314736

>>> ll=[100,200,300];

>>> print(ll);

[100, 200, 300]

>>> print(id(ll));

2784928387648

>>> print(ll[0]);

100

>>> ll[0]=1000;

>>> print(ll[0]);

1000

>>> print(id(ll));

2784928387648

ArithmeticOperator.py

a=10;

b=3;

res1 = a+b;

res2 = a-b;

res3 = a\*b;

res4 = a/b;

res5 = a//b;

res6 = a\*\*b;

res7 = a%b;

print(res1);

print(res2);

print(res3);

print(res4);

print(res5);

print(res6);

print(res7);

a=1+a;

a+=1;

in and is operator example

name="Welcome to python training";

print("in operator example");

print(name);

print("o" in name);

print("W" in name);

print("w" in name);

print("python" in name);

print("is operator example");

a=500;

b=500;

c=500;

print("a ",a);

print("b",b);

print("c",c);

print(id(a));

print(id(b));

print(id(c));

print(id(500));

print(a is b);

print(a is c);

a=600;

print("a ",a);

print(id(a));

if statement example

#a=-5;

#if a > 0 :

# print("number is +ve");

# print("Condition true");

#print("Normal Statement execute");

'''

a=10;

b=50;

if a > b:

print("a is largest");

else:

print("b is largest");

print("Normal Statement execute");

'''

sub1=80;

sub2=90;

sub3=90;

total = sub1+sub2+sub3;

avg = total/3;

if avg > 90:

print("A+");

elif avg >80:

print("A");

elif avg>70:

print("B");

else:

print("C");

print("done!");

looping.py

'''

for n in range(1,10):

print(n);

'''

'''

for n in range(1,10,2):

print(n);

'''

'''

list =[100,200,300,400,500];

for n in list:

print(n);

'''

'''

i=1;

n=10;

while i <= n:

print(i);

i=i+1;

print("while loop finish");

'''

x=0;

while True:

print(x);

x=x+1;

if(x==5):

break;

print("loop finish");