pragma solidity 0.6.12;

contract Basics {

//integer, string, bool, bytes

//arrays, enum, struct, mapping (dictionary in python)

int public a=4; // default =0

int8 public b=10;

int16 public c=20;

//unsigned integers

//uint8 = 256 - 0 to 255

uint8 public d=30;

uint public e=19;

//string

string public name="Raghu"; //default - ""

//bool

bool public tf = true; //default - false

//bytes

bytes public byteSample = "abc"; //0x616263

bytes public byteSample2 = "ABC"; //0x414243

//arrays - combination of same type of data

string[] public students=["Raghu","John"]; //dynamic array

string[15] public students2; //fixed length arrays

int[] public sampleint=[1,2,3,4];

// push, pop, length - are possible in solidity also

//mapping

mapping(string=>bool) public map;

//enum - Enumeration - save storage, confine options for users

enum Cities {LosAngeles, California, SanJose, Toronto}

Cities public c1 = Cities.LosAngeles;

Cities public c2 = Cities.SanJose;

//struct

struct Student {

string name;

bool attendance;

int rollNo;

int marks;

}

Student public student1;

}