

# **1)Types of programming languages:**

## **1. High level programming languages**

- ❖ Python
- ❖ Java
- ❖ PHP
- ❖ C
- ❖ JavaScript

## **2. Low level programming languages**

- ❖ Assembly
- ❖ C
- ❖ C++
- ❖ Fortran

## **3. scripted programming languages**

- ❖ Python
- ❖ JavaScript
- ❖ Ruby
- ❖ C
- ❖ Java
- ❖ CSS

## **4. open programming languages**

- ❖ Python
- ❖ Java
- ❖ MATLAB
- ❖ PHP
- ❖ C
- ❖ Kotlin

## **5. closed programming languages**

- ❖ Java
- ❖ C++
- ❖ Visual Basic

## 2) Clean code:

- ❖ تسمية المتغيرات بشكل واضح و مختصر ومعبر عنه.
- ❖ تنظيم وتنسيق الكود.
- ❖ بساطة الكود ووضوحه.
- ❖ تجنب التكرار (عن طريق استخدام دالة).

## 3) Range of data types:

C Basic Data Types	32-bit CPU		64-bit CPU	
	Size (bytes)	Range	Size (bytes)	Range
char	1	-128 to 127	1	-128 to 127
short	2	-32,768 to 32,767	2	-32,768 to 32,767
int	4	-2,147,483,648 to 2,147,483,647	4	-2,147,483,648 to 2,147,483,647
long	4	-2,147,483,648 to 2,147,483,647	8	-9,223,372,036,854,775,808 to 9,223,372,036,854,775,807
long long	8	9,223,372,036,854,775,808-9,223,372,036,854,775,807	8	9,223,372,036,854,775,808-9,223,372,036,854,775,807
float	4	3.4E +/- 38	4	3.4E +/- 38
double	8	1.7E +/- 308	8	1.7E +/- 308