

Assignment 5

Ans 1 statically. It is designed to optimize hardware efficiency. So that the code you write executes as quickly as possible. It is designed to optimize the programmer efficiency, so you can implement functionality with less code.

Ans 2. variable is used to store the value. It is a container which is used to store.
 int age = 25
 here, age is variable.

Ans 3. int age = 25;
 here value is 25
 age is variable
 it is data type.

Ans 4. Primitive data type is pre defined data type which is already defined.

Primitive

Numeric

Non numeric

int

float

Char

Boolean

Integer

float

long

double

short

byte

Ans 5 Each variable should be given unique name called identifier.

int money; double accountBalance;
 Lex money & accountBalance are identifiers
 It starts with letter, \$ and -

Ans 6 operator in C++

- 1) Arithmetic: $+$, $-$, $*$, $/$, $\%$
- 2) Unary: $++$, $--$
- 3) Relation: $==$, $!=$, $>$, $<$, $>=$, $<=$
- 4) Logical: $&&$, $||$, $!$ (AND, OR, NOT)
- 5) Bitwise: $&$, $|$, \wedge , \sim , $<<$, $>>$
- 6) Assignment: $=$, $+=$, $-=$, $*=$, $/=$

Ans 7 $++$: $a = 10$, $b = 0$, $b = ++a$

$++a$: $\text{cout}(a) \rightarrow 11$
 $\text{cout}(b) \rightarrow 11$

$a++$: $b = a++$
 $\text{cout}(a) \rightarrow 11$ a [10] [11] b [10]
 $\text{cout}(b) \rightarrow 10$

$--a$: $\text{cout}(c) \rightarrow 9$
 $\text{cout}(b) \rightarrow 9$ $b = --a$
 a [10] [9] b [9]

$a--$: $\text{cout}(c) \rightarrow 9$
 $\text{cout}(b) \rightarrow 10$ $b = a--$
 a [10] [9] b [10]