

1.no

2.no

3yes

4.the unary+ operator is present only for completeness;when applied to a numeric value,variable,or expression,the resulting value is no different from the original value of its operand . omitting the unary + operator from the following statement.

5.* _///_%_+,-_ =

6. x=2

(a) print ("x") answer=x

(B)print('x') answer= x

(c)print(x) answer=2

(d)print("x+1") answer=x+1

(e)print('x'+1) answer='x' is str , 1 is int cant concatenate them to each other

(F)print(x+1) answer=3

7. i1=2

i2=5

i3=-3

d1=2.0

d2=5.0

d3=-0.5

(a)i1+i2→print(i1+i2) answer→7

(b)i1/i2→print(i1/i2) answer→0.4

(c)i1//i2→print(i1//i2) answer→0

(d)i2/i1→print(i2/i1) answer→2.5

(e)i2//i1→print(i2//i1) answer→2

(f)i1*i3→print(i1*i3) answer→-6

(g)d1+d2→ print(d1+d2) answer→7.0

(h)d1/d2→ print(d1/d2) answer→0.4

(i) d2/d1→ print(d2/d1) answer→2.5

(j) $d3*d1 \rightarrow \text{print}(d3*d1)$ answer $\rightarrow -1.0$
(k) $d1+i2 \rightarrow \text{print}(d1+i2)$ answer $\rightarrow 7$
(l) $i1/d2 \rightarrow \text{print}(i1/d2)$ answer $\rightarrow 0.4$
(m) $d2/i1 \rightarrow \text{print}(d2/i1)$ answer $\rightarrow 2.5$
(n) $i2/d1 \rightarrow \text{print}(i2/d1)$ answer $\rightarrow 2.5$
(o) $i1/i2*d1 \rightarrow \text{print}(i1/i2*d1)$ answer $\rightarrow 0.8$
(p) $d1*i1/i2 \rightarrow \text{print}(d1*i1/i2)$ answer $\rightarrow 0.8$
(q) $d1/d2*i1 \rightarrow \text{print}(d1/d2*i1)$ answer $\rightarrow 0.8$
(r) $i1*d1/d2 \rightarrow \text{print}(i1*d1/d2)$ answer $\rightarrow 0.8$
(s) $i2/i1*d1 \rightarrow \text{print}(i2/i1*d1)$ answer $\rightarrow 5.0$
(t) $d1*i2/i1 \rightarrow \text{print}(d1*i2/i1)$ answer $\rightarrow 5.0$
(u) $d2/d1*i1 \rightarrow \text{print}(d2/d1*i1)$ answer $\rightarrow 5.0$
(v) $i1*d2/d1 \rightarrow \text{print}(i1*d2/d1)$ answer $\rightarrow 5.0$

8. Nothing _ we use (#) for commenting a code

9. $i1=2$

$i2=5$

$i3=-3$

$d1=2.0$

$d2=5.0$

$d3=-0.5$

(a) $i1+(i2*i3)$ answer $\rightarrow -13$
(b) $i1*(i2+i3)$ answer $\rightarrow 4$
(c) $i1/(i2+i3)$ answer $\rightarrow 1.0$
(d) $i1//(i2+i3)$ answer $\rightarrow 1$
(e) $i1/i2+i3$ answer $\rightarrow -2.6$
(f) $i1//i2+i3$ answer $\rightarrow -3$
(g) $3+4+5/3$ answer $\rightarrow 8.66666$
(h) $3+4+5//3$ answer $\rightarrow 8$

- (i) $(3+4+5)/3$ answer→ 4.0
 (j) $(3+4+5)//3$ answer→ 4
 (k) $d1+(d2*d3)$ answer→-0.5
 (l) $d1+d*d3$ answer→-0.5
 (m) $d1/d2-d3$ answer→0.9
 (n) $d1/(d2-d3)$ answer→0.363636
 (o) $d1+d2+d3/3$ answer→6.833333
 (p) $(d1+d2+d3)/3$ answer→2.16666666
 (q) $d1+d2+(d3/3)$ answer→6.833333
 (r) $3*(d1+d2)*(d1-d3)$ answer→52.5

10.#

11.its effect finish when we go to next line

12. In general, programmers are not prone to providing too many comments. When in doubt they add a remark.

13.it use to explain the reason of writing that code at the line or to help people understand the code better

14. Teams of programmers develop commercial software. They must be able to review and revise code written by others. Any coding techniques that make it easier for people to read and understand each other's code greatly facilitates the development process.

15.

*Name Error→if we add letters with out define it we will see this error

*Value Error→if an variable wasn't assigned we will have this kind of error

*Zero Division Error→ Division by zero is undefined in mathematics, and division by zero in Python is illegal.

*Indentation Error→it happen when wrong indentation is use in code

*Overflow Error→it happen when the result of code is too strong and more than memory s capacity

*Syntax Error→if the interpreter find an invalid program statement while it translate a phase it will end the program and show an error .

*Type Error→if we have two different kind like int and str we will see this error

16. # Get two numbers from the user

```

n1 = float(input())      # 1
n2 = float(input())      # 2
# Compute sum of the two numbers
print(n1 + n2)           # 3
# Compute average of the two numbers
print((n1+n2)/2)         # 4  wrong → print((n1+n2)/2)
# Assign some variables
d1 = d2 = 0              # 5
# Compute a quotient
print(n1/d1)             # 6  wrong → print(n1%d1)
# Compute a product
n1*n2 = d1               # 7
# Print result
print(d1)                # 8

```

17.

- (A) $x = x + 1$
- (b) $x = x / 2$
- (C) $x = x - 1$
- (d) $x = x + y$
- (e) $x = x - (y + 7)$
- (F) $x = 2 * x$
- (g) $\text{number-of-closed-cases} = \text{number-of-closed-cases} + 2 * \text{ncc}$

- (a) $x++$
- (b) $x /= 2$
- (c) $x--$
- (d) $x += y$
- (e) $x -= y + 7$

(f) $x*=2$

(G) $ncc+=2*ncc$

18. $x1 = 2$

$x2 = 2$

$x1 += 1$

$x2 -= 1$

`print(x1)` answer → 3

`print(x2)` answer → 1

why? → `print(x1)` → $x1=2$ $x1+=1$ → $(1+2)$

why? → `print(x2)` → $x2=2$ $x2-=1$ → $(2-1)$

19. $r = 0$

$PI = 3.14159$

Formula for the area of a circle given its radius

$C = 2*PI*r$

Get the radius from the user

`r = float(input("Please enter the circle's radius: "))`

Print the circumference `print("Circumference is", C)`

(a) The program does not produce the intended result. Why?

The program does not produce the intended result because it does not calculate the circumference of the circle using the formula provided

(b) How can it be repaired so that it works correctly?

`pl=3.14159`

`r=float(input("pleas enter a number"))`

`c=2*pl*r`

`print("answer is",c)`

20.

Find square area:

```
a=int(input("enter square s side"))
```

```
s=a*a
```

```
print("square area is",s)
```

21.remainder of dividing two numbers.

```
a=int(input("enter first number"))
```

```
b=int(input("enter second number"))
```

```
print("answer is",a%b)
```