1. Which of the following statements about the **// operator** is correct?

A) It performs standard division and returns a float.

B) It returns the remainder of a division.

C) It performs floor division and returns an integer.

D) It raises the number to the power of another number.

**Answer: C**

2. What does the following Python code print?

**x = [i\*\*2 *for* i *in* range(10) *if* i % 2 == 0]**

**result = [y *for* y *in* x *if* y % 4 == 0]**

**print(result)**

A) [0,4,16,36,64]

B) [4,16,36]

C) [0,4,36,64]

D) [0,4,64]

**Answer: A**

3. What does the following Python code print?

**a = [x\*3 *for* x *in* range(1,8) *if* x%2==0]**

***for* i *in* range(len(a)):**

***if* a[i]%12==0:**

**a.append(a[i]\*5)**

**print(a)**

A) [12,24,36,48]

B) [6,12,18,34]

C) [6,12,18,60]

D) [6,18,24,60]

**Answer: C**

4. What does the following Python code print?

**a = 100;b = 30**

**a = a+b**

**b = a+b**

**print(b)**

A) 160

B) 130

C) 190

D) 220

**Answer: A**

5. What does the following Python code print?

**a=8;b=15**

**print(b+4\*a+97%7+19)**

A) 68

B) 72

C) 76

D) 85

**Answer: B**

6. What does the following Python code print?

**p = 15**

**q = 4**

**print(p%8+2\*\*q-p\*32/4\*\*2)**

A) 7

B) -7.0

C) 7.0

D) -7

**Answer: B**

7. What does the following Python code print?

**a = 0;b = 1;rs = []**

***for* i *in* range(5):**

**temp = a+b**

**a = b**

**b = temp**

**rs.append(b)**

**print(rs)**

A) [1,2,3,5,8]

B) [0,1,1,2,3]

C) [2,3,5,8,13]

D) [1,1,2,3]

**Answer: A**

8. What does the following Python code print?

**m =  20**

***if* (m\*(5+3)\*\*2//(146%12)) == m:**

**m = 40**

***else*:**

**m = 10**

**print(m)**

A) 20

B) 40

C) 10

D) 0

**Answer: C**

9. Which of the following operators has the highest precedence in Python?

A) Addition(+)

B) Multiplication(\*)

C) Exponentiation(\*\*)

D) Bitwise AND(&)

**Answer: C**

10. The result of the expression **not(8 == 8 and 2\*\*3 == 9)** will be

A) True

B) False

**Answer: A**

11. What does the following Python code print?

***if* 25<<2&18%5==1234>>4&(25//3\*\*4):**

**print("True")**

***else*:**

**print("False")**

A) True

B) False

**Answer: A**

12. What does the following Python code print?

***p = 10;q = 20***

***result = ~p&~q|(p+q//p-5)***

***print(result)***

A) 25

B) 28

C) -25

D) -28

**Answer: C**

13. What does the following Python code print?

***x = -3;y=-24***

***result = ((x >> 2) & (y << 1)) | (~x ^ y)***

***print(result)***

A) 3

B) -4

C) 4

D) -6

**Answer: D**

14. What does the following Python code print?

***result = (15 & 7 ^ (8 | 2)) - (4 << 1 + 5)***

***print(result)***

A) -645

B) -243

C) -125

D) -327

**Answer: B**

15. What does the following Python code print?

***x=8;y=22;z=17***

***print(x//2\*y-(z\*3+18))***

A) 19

B) 16

C) 24

D) 23

**Answer: A**

16. What does the following Python code print?

***for i in range(5):***

***if i&(5-i):***

***print(1,end='')***

***else:***

***print(0,end='')***

A) 00110

B) 01100

C) 11000

D) 10101

**Answer: A**

17. Which of the following statements is true about the XOR (^) operator?

A) It sets a bit if both bits are 1.  
B) It clears a bit if both bits are 0.  
C) It toggles a bit if the bits are different.  
D) It performs the same function as the OR operator.

**Answer: C**

18. Which of the following operators can be used to check if a value is present in a list?

A) and

B) in

C) is

D) or

**Answer: B**

19. What does the following Python code print?

***a = 182963***

***num1 = num2 = 0***

***while a:***

***if (a%10)%2==0:***

***num1+=a%10***

***else:***

***num2+=a%10***

***a//=10***

***print(num1-num2)***

A) 2

B) -3

C) 5

D) 3

**Answer: D**

20. What does the following Python code print?

***x = 'AaEeIiOoUu'***

***y = 'Hello World'***

***z = ''***

***for i in y:***

***if i not in x:***

***z = i+z***

***print(z)***

A) dlrW llH

B) dlrw llH

C) dlrw llh

D) Hll Wrld

**Answer: A**

21. What does the following Python code print?

***dict = {}***

***w1 = "mississippi"***

***for i in w1:***

***if i not in dict:***

***dict[i]=1***

***else:***

***dict[i]\*=2***

***print(dict[s])***

A) 8

B) Error

C) 7

D) 9

**Answer: A**

22. If a = 5 and b = 12, the expression (a < b or b > 20) and not(a == 5) will return:

A) False

B) True

**Answer: A**

23. What does the following Python code print?

***a = 10;b = 4;c = 2***

***result = a \*\* b // c % 5***

***print(result)***

A) 11

B) 0

C) 7

D) 9

**Answer: B**

24. What does the following Python code print?

***num = 31***

***result = 0***

***while num>0:***

***if num%2==1:***

***result+=1***

***num = num>>1***

***print(result)***

A) 12

B) 0

C) 5

D) 9

**Answer: C**

25. What does the following Python code print?

***a = -5;b=-17***

***result = (a | b) ^ (b >> 2)***

***print(result)***

A) 4

B) 1

C) 3

D) 2

**Answer: A**

26. What does the following Python code print?

***a = 4;b = 7;c = 5***

***print(((a ^ b) & ~(c | a)) | ((b << 2) ^ (c >> 1)))***

A) 10

B) 20

C) 30

D) 40

**Answer: C**

27. What does the following Python code print?

***x=45;y=23;z=12***

***rs = ((x & y) | (~z)) ^ (y << 2)***

***print(rs)***

A) -84

B) -85

C) -80

D) -87

**Answer: B**

28. What does the following Python code print?

***x=45;y=23;z=12***

***rs = ((x & y) | (~z)) ^ (y << 2)***

***print(rs)***

A) 792

B) 782

C) 768

D) 779

**Answer: A**

29. The result of the expression *not*(23%6+27-2\*\*5) will be

A) True

B) False

**Answer: A**

30. What does the following Python code print?

***num1 = 32***

***num2 = 12***

***while num2 != 0:***

***num1, num2 = num2, num1 % num2***

***print(num1)***

A) 6

B) 4

C) 2

D) 8

**Answer: B**

31. What does the following Python code print?

***a = 25***

***b = 3***

***a = a+b\*2***

***b+=2***

***print(a+b)***

A) 28

B) 40

C) 32

D) 36

**Answer: D**

32. What does the following Python code print?

***lst = [x for x in range(1, 10) if x % 2 == 0 or x % 3 == 0]***

***result = sum(i for i in lst if i % 4 != 0)***

***print(result)***

A) 22

B) 20

C) 18

D) 30

**Answer: B**

33. What does the following Python code print?

***w1 = 'I love Python'***

***w2 = 'Welcome to Programming'***

***result = set(i for i in w1 if i not in w2)***

***print(result)***

A) ('I', 'h', 'v', 'y')

B) ['I', 'h', 'v', 'y']

C) {'I', 'v', 'h', 'y'}

D) {'I', 'h', 'v', 'y'}

**Answer: D**

34. What does the following Python code print?

***num1 = 1258***

***result = 0***

***while num1:***

***result+=num1%10***

***num1//=10***

***print(result)***

A) 16

B) 13

C) 15

D) 10

**Answer: A**

35. What does the following Python code print?

***lst = [x for x in range(61) if x%6==0]***

***result =list((i\*3 for i in range(11) if i\*3 in lst))***

***print(sum(result))***

A) 60

B) 54

C) 90

D) 86

**Answer: C**