Operator Related Problems

(Total 15 questions)

SL		Problem statement	Difficulty	
1.	_	bers X and Y as inputs, then calculate and print the values ultiplication, division (quotient and reminder).	levels *	
	Sample input (X,Y)	Sample output	<u>└</u> ┐	
	5 10	Addition: 15 -14 % 3 = -2		
		Multiplication: 50 Quotient: 0		
		Reminder: 5		
	-5 10.5	Addition: 5.5 Subtraction: -15.5		
		Multiplication: -52.5		
		Quotient: 0		
		Reminder: -48		
2.	Program that will calculate the o	circumference of a circle having radius r. Area, A = 2 * Pi * r	*	
	Sample input (r)	Sample output		
	5	Area: 31.4		
	10.5	Area: 65.94		
3.	1	bers (a, b) as inputs and compute the value of the equation	*	
	- (Without using math.h) $X = (3.31 * a^2 + 2.01 * b^3) / (7.16 * b^2 + 2.01 * a^3)$			
	Sample input (a, b)	Sample output		
	5 10.5	X = 2.315475		
	100 -250	X = -12.766287		

Sample input(X)	Sample output	
5	X++: 5	
	++X: 6	
	X: 5	
	X : 4	
-5	X++: -5	
	++X: -4	
	X: -5	
	X : -6	
Program that will inci	ement and decrement a number \mathbf{X} by \mathbf{Y} . (Use += a	and -= operators)
Sample input(X,Y)	Sample output	
5 10	Incremented Value: 10	1
	Decremented Value: -5	
-5 5	Incremented Value: 0	
	Incremented Value: 0 Decremented Value: -1 iply and divide a number X by Y . (Use *= and /= 6	0
	iply and divide a number X by Y . (Use *= and /= o	0
Program that will mu Sample input(X,Y) 56 10	Decremented Value: -1 iply and divide a number X by Y. (Use *= and /= a Sample output Multiplication: 560 Division: 5	0
Program that will mu Sample input(X,Y)	Decremented Value: -1 iply and divide a number X by Y. (Use *= and /= a Sample output Multiplication: 560 Division: 5 Multiplication: 560	0
Program that will mu Sample input(X,Y) 56 10	Decremented Value: -1 iply and divide a number X by Y. (Use *= and /= a Sample output Multiplication: 560 Division: 5	0
Program that will mu Sample input(X,Y) 56 10 -56 -10 Program that will dec	Decremented Value: -1 iply and divide a number X by Y. (Use *= and /= a	operators)
Program that will mu Sample input(X,Y) 56 10 -56 -10 Program that will decoperform floating to in	Decremented Value: -1 iply and divide a number X by Y. (Use *= and /= o Sample output Multiplication: 560 Division: 5 Multiplication: 560 Division: 5 are and initialize an integer and a floating point reger and integer to floating conversions using	operators)
Program that will mu Sample input(X,Y) 56 10 -56 -10 Program that will decorporam floating to in (a) Assignment of	Decremented Value: -1 iply and divide a number X by Y. (Use *= and /= o Sample output Multiplication: 560 Division: 5 Multiplication: 560 Division: 5 are and initialize an integer and a floating point reger and integer to floating conversions using	operators)
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Program that will mu Sample input(X,Y) 56 10 -56 -10 Program that will deceptorm floating to in (a) Assignment of (b) Type casting Sample input	Decremented Value: -1 iply and divide a number X by Y. (Use *= and /= o Sample output Multiplication: 560 Division: 5 Multiplication: 560 Division: 5 are and initialize an integer and a floating point reger and integer to floating conversions using eration Sample output Assignment: 123.125000 assigned to an int	operators) number. Then it will produces 123 es -150.000000

9. Program that will evaluate the following equations - $X = a - b / 3 + c * 2 - 1$ $Y = a - (b / (3 + c) * 2) - 1$ $Y = a - ((b / 3) + c * 2) - 1$ $Y = a - ((b / 3) + c * 2) - 1$ Sample input (a, b, c) Sample output $Y = a - a / a / b / a / b / c / a / c / a / c / c / c / a / c / c$			Cample autrust	
9. Program that will evaluate the following equations - $X = a - b / 3 + c * 2 - 1$ $Y = a - (b / (3 + c) * 2) - 1$ $Z = a - ((b / 3) + c * 2) - 1$ $Z = a - ((b / 3) + c * 2) - 1$ $Z = a - ((b / 3) + c * 2) - 1$ Sample input (a, b, c) Sample output $X = 10$ $Y = 4$ $Z = -1$ 10. Program that will take a, b & c as inputs and decide if the statements are True (1) of False (0) a) $(a + b) \le 80$ b) $! (a + c)$ c) $a! = 0$ Sample input (a, b, c) Sample output a) 10 -10 0 Sample output a) 10 -10 0 Sample output a) 10 -10 0 Sample output a) 11. Program that will take a, b & c as inputs and decide if the statements are True (1) of False (0) 1) $(a + b) \le 80$ && $b \ge 0$ 2) $(a - b) = 0$ $ c = 0$ 3) $a! = b$ $ c = 0$ 3		Sample input (x, y)	Sample output	
9. Program that will evaluate the following equations - $X = a - b / 3 + c * 2 - 1$ $Y = a - (b / (3 + c) * 2) - 1$ $Z = a - ((b / 3) + c * 2) - 1$ $Z = a - ((b / 3) + c * 2) - 1$ $Z = a - ((b / 3) + c * 2) - 1$ Sample input (a, b, c) Sample output $X = 10$ $Y = 4$ $Z = -1$ 10. Program that will take a, b & c as inputs and decide if the statements are True (1) of False (0) a) $(a + b) \le 80$ b) $! (a + c)$ c) $a! = 0$ Sample input (a, b, c) Sample output a) 1 b) 0 c) 1 11. Program that will take a, b & c as inputs and decide if the statements are True (1) of False (0) 11. Program that will take a, b & c as inputs and decide if the statements are True (1) of False (0) 12. $(a + b) \le 80$ & $b \ge 0$ c) $(a - b) = 0$ $ c = 0$ 3) $a! = b$ $ (b < a) & b \ge 0$ Sample input (a, b, c) Sample output 10 -10 0 Sample output 11 0				
Sample input (a, b, c) Sample output		30 -20	IVIAX. 30	
	9.	Program that will evaluate the foll	owing equations -	*
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Sample input (a, b, c) Sample output $Y = 10$ $Y = 4$ $Z = -1$				
10. Program that will take a , b & c as inputs and decide if the statements are True (1) of False (0) a) $(a+b) \le 80$ b) $!(a+c)$ c) $a! = 0$ Sample input (a, b, c) 10 -10 0 3 1 b) 0 c) 1 Program that will take a , b & c as inputs and decide if the statements are True (1) of False (0) 11. Program that will take a , b & c as inputs and decide if the statements are True (1) of False (0) 12. $(a-b) = 0$ $ c! = 0$ 33. $a! = b$ $ (b < a) & c > 0$ Sample input (a, b, c) Sample input (a, b, c) Sample output 10 -10 0 Sample output 11 0 -10 0		Z	= a - ((b/3) + c*2) - 1	
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11. Program that will take a , b & c as inputs and decide if the statements are True (1) of False (0) 11. $(a+b) \le 80 & b \ge 0$ 12. $(a+b) \le 80 & b \ge 0$ 23. $(a+b) \le 80 & b \ge 0$ 24. $(a+b) \le 80 & b \ge 0$ 25. $(a-b) = 0 c! = 0$ 36. $a! = b (b < a) & b \ge 0$ 27. $a! = b (b < a) & b \ge 0$ 28. $a! = b (b < a) & b \ge 0$ 29. $a! = b (b < a) & b \ge 0$ 20. $a! = b (b < a) & b \ge 0$ 21. $a! = b (b < a) & b \ge 0$ 22. $a! = b (b < a) & b \ge 0$ 23. $a! = b (b < a) & b \ge 0$ 24. $a! = b (b < a) & b \ge 0$ 25. $a! = b (b < a) & b \ge 0$ 26. $a! = b (b < a) & b \ge 0$ 27. $a! = b (b < a) & b \ge 0$ 28. $a! = b (b < a) & b \ge 0$ 29. $a! = b (b < a) & b \ge 0$ 20. $a! = b (b < a) & b \ge 0$ 21. $a! = b (b < a) & b \ge 0$ 22. $a! = b (b < a) & b \ge 0$ 23. $a! = b (b < a) & b \ge 0$ 24. $a! = b (b < a) & b \ge 0$ 25. $a! = b (b < a) & b \ge 0$ 26. $a! = b (b < a) & b \ge 0$ 27. $a! = b (b < a) & b \ge 0$ 28. $a! = b (b < a) & b \ge 0$ 29. $a! = b (b < a) & b \ge 0$ 20. $a! = b (b < a) & b \ge 0$ 20. $a! = b (b < a) & b \ge 0$ 21. $a! = b (b < a) & b \ge 0$ 22. $a! = b (b < a) & b \ge 0$ 23. $a! = b (b < a) & b \ge 0$ 24. $a! = b (b < a) & b \ge 0$ 25. $a! = b (b < a) & b \ge 0$ 26. $a! = b (b < a) & b \ge 0$ 27. $a! = b (b < a) & b \ge 0$ 28. $a! = b (b < a) & b \ge 0$ 29. $a! = b (b < a) & b \ge 0$ 20. $a! = b (b < a) & b \ge 0$ 20. $a! = b (b < a) & b \ge 0$ 21. $a! = b (b < a) & b \ge 0$ 22. $a! = b (b < a) & b \ge 0$ 23. $a! = b (b < a) & b \ge 0$ 24. $a! = b (b < a) & b \ge 0$ 25. $a! = b (b < a) & b \ge 0$ 26. $a! = b (b < a) & b \ge 0$ 27. $a! = b (b < a) & b \ge 0$ 28. $a! = b (b < a) & b \ge 0$ 29. $a! = b (b < a) & b \ge 0$ 20. $a! = b (b < a) & b \ge 0$ 20. $a! = b (b < a) & b \ge 0$ 21. $a! = b (b < a) & b \ge 0$ 22. $a! = b (b < a) & b \ge 0$ 23. $a! = b (b < a) & b \ge 0$ 24. $a! = b (b < a) & b \ge 0$ 25. $a! = b (b < a) & b \ge 0$ 26. $a! = b (b < a) & b \ge 0$ 27. $a! = b (b < a) & b \ge 0$ 28. $a!$				
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b) 0 c) 1 Program that will take a , b & c as inputs and decide if the statements are True (1) of False (0) 1) $(a+b) \le 80 \&\& b \ge 0$ 2) $(a-b) == 0 \mid c! = 0$ 3) $a! = b \mid (b < a) \&\& c > 0$ Sample input (a, b, c) 10 -10 0 1) 0				
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1) $(a+b) \le 80 \&\& b \ge 0$ 2) $(a-b) == 0 \mid \mid c! = 0$ 3) $a! = b \mid \mid (b < a) \&\& c > 0$ Sample input (a, b, c) Sample output 10 -10 0 1) 0	11.	•	nputs and decide if the statements are True (1) of False	***
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10 -10 0 1) 0				
Z) 1		10 -10 0	,	
3) 1		l I	2) 1	

the formula, (here, dot (.) s	•	***
$\mathbf{root} = \frac{-\mathbf{b} \pm \mathbf{sqrt}(\mathbf{b}^2 - \mathbf{b}^2)}{2 \cdot \mathbf{a}}$	<u>- 4. a. c)</u>	
Sample input (a, b, c)	Sample output	
2 4 -16	2.00 -4.00	
1 2 3	Imaginary	
Program that will evaluate	the equation	***
$2\cos^2 x - \sqrt{3}\sin x + \sin$	$\frac{X}{2}$	
	where 1<= x <=180 [No checking needed]	
Sample input (x)	Sample output	
30	1.810066	
120	0.778151	
180 Program that will take a flo	3.954243 Dating point number X as input and evaluate A,B,C where-	**
Program that will take a flo A = Valu B = Valu C = Abso	3.954243 Doating point number X as input and evaluate A,B,C where when X is rounded up to the nearest integer e when X is rounded down to the nearest integer blute value of X	**
Program that will take a floor A = Value B = Value C = Abso	3.954243 Doating point number X as input and evaluate A,B,C wherele when X is rounded up to the nearest integer e when X is rounded down to the nearest integer blute value of X Sample output	**
Program that will take a flo A = Valu B = Valu C = Abso	3.954243 Dating point number X as input and evaluate A,B,C where when X is rounded up to the nearest integer e when X is rounded down to the nearest integer blute value of X Sample output A = 11, B = 10, C = 10.6	**
Program that will take a floor A = Value B = Value C = Absorber 10.6 -77.9	3.954243 Deating point number X as input and evaluate A,B,C where when X is rounded up to the nearest integer e when X is rounded down to the nearest integer blute value of X Sample output A = 11, B = 10, C = 10.6 A = 78, B = 77, C = 77.9	
Program that will take a floor A = Value B = Value C = Absorber 10.6 -77.9 Program to find size of int,	3.954243 Doating point number X as input and evaluate A,B,C wherele when X is rounded up to the nearest integer e when X is rounded down to the nearest integer olute value of X Sample output A = 11, B = 10, C = 10.6 A = 78, B = 77, C = 77.9 float, double and char of the system.	**
Program that will take a floor A = Value B = Value C = Absorber 10.6 -77.9	3.954243 Doating point number X as input and evaluate A,B,C wherele when X is rounded up to the nearest integer e when X is rounded down to the nearest integer plute value of X Sample output A = 11, B = 10, C = 10.6 A = 78, B = 77, C = 77.9 Float, double and char of the system. Sample output	
Program that will take a floor A = Value B = Value C = Absorber 10.6 -77.9 Program to find size of int,	3.954243 Doating point number X as input and evaluate A,B,C where- le when X is rounded up to the nearest integer le when X is rounded down to the nearest integer blute value of X Sample output A = 11, B = 10, C = 10.6 A = 78, B = 77, C = 77.9 Float, double and char of the system. Sample output Size of int in byte(s) = 4	
Program that will take a floor A = Value B = Value C = Absorber 10.6 -77.9 Program to find size of int,	3.954243 Doating point number X as input and evaluate A,B,C wherele when X is rounded up to the nearest integer e when X is rounded down to the nearest integer blute value of X Sample output A = 11, B = 10, C = 10.6 A = 78, B = 77, C = 77.9 float, double and char of the system. Sample output Size of int in byte(s) = 4 Size of float in byte(s) = 4	
Program that will take a floor A = Value B = Value C = Absorber 10.6 -77.9 Program to find size of int,	3.954243 Doating point number X as input and evaluate A,B,C where- le when X is rounded up to the nearest integer le when X is rounded down to the nearest integer blute value of X Sample output A = 11, B = 10, C = 10.6 A = 78, B = 77, C = 77.9 Float, double and char of the system. Sample output Size of int in byte(s) = 4	