

CT-2 SOLUTIONS

Question	Solution
1(a)	$(58)_{10} = 00111010$ (in binary) $(49)_{10} = 00110001$ (in binary) $= 11001110$ (in 1s complement) $= 11001111$ (in 2s complement) <pre> 0 0 1 1 1 0 1 0 1 1 0 0 1 1 1 1 ===== 0 0 0 0 1 0 0 1 </pre>
1(b)	$(41)_{10} = 0\ 0101001$ $(-67)_{10} = 1\ 1000011$
1(c)	$(167.375)_{10} = 10100111.011$ (in binary) $(1101011011.01101)_2 = 35B.68$ (in hex)
2	_PNT * OR struct point * (_PNT *) OR (struct point *) sizeof(_PNT) OR sizeof(struct point) NULL tmpArray allocate_array_of_points (N) &p[i].x OR &(p+i)->x &p[i].y OR &(p+i)->y p[i].x OR (p+i)->x p[i].y OR (p+i)->y
3(a)	(C)
3(b)	Error 1: Type mismatch of parameter 'r' in fopen(). ==> should be "r" Error 2: Undefined symbol 'ch' Error 3: Type mismatch in parameter *fp in fclose() ==> should be fp Error 4: unsigned char is not a valid statement [1 mark for each correctly identified error; full marks if any 3 errors correctly identified]
3(c)	fPtr1==NULL fPtr2==NULL 1 -1 += 1 OR = *col + 1 OR (*col)++ ch1==EOF && ch2==EOF OR 1 [i.e., always true]
4(a)	i < row int * int ** col * sizeof(int) *(arr1+i)+j OR &arr1[i][j] OR arr[i]+j
4(b)	&arr1[i][j] &arr1[i][j] arr1[i][j]
4(c)	80 (in hex)