## Cycle II

## LAB 13:

Aim: Write a program for error detecting code using CRC CCITT (16-bits).

	CYCLE IT
1	Write a program for veror selecting code using CRC-CC.
	#include <stoio.h> #include <string.h></string.h></stoio.h>
	void binary XOR (char * result, court char *a)
	for (int i=0; i<16;i++)  result [i] = (a [i] = = [i])? '0': 'i';
	result [16] = 10';
	void CR ( Court char * data, int length, char
	word CR ( (court char * data, int length, char * checksum)
-	ther ore [17];  for (int i=0; i<16;i++)  cre[i] = '0';
	for (int i=0; i < length; i++)
	for ( int j = 0 ; j < 8 ; j + + )
	char msb = Crc[0]; for (in k=0; K<  6; k++) Cre[k] = Orc[k+1];

classmate Grc[15] = '0'; if (msb = = '1') binary XOK (temp, orc, "100010000001000")
stropy (crc, temp); stropy (checksum, orc); main () void char data [100];
printf ("Enter data in binary:");
exauf ("% S", data); int data length = 8 + 8 len (data); char checkerum (177; calculate CRC (data, data length, checkerum); chas vecewes (heckings [17]; printf ("Enter received CRC:"); scarf ("%s", received Checksum); if (Stromp (received Checkeum, checkeum) == 0)
frints ("Data is error-free \n") else frints ("Data contains errors. ) ");

Roturn O;  3  Outfut: Enter data in binany: 1100101011100100 1  Calculated CRC: 1110100101110001  Entered received CRC:1110100101110001  Data is error free.		
roturn O;  3  Outfut: Enter data in binary: 1100/010111001001  Calculated CRC: 1110/00/01/10001  Entered security CRC: 111/0100101110001  Data is error free.		al results
return 0;  3  Output: Enter data in binary: 1100/010111001001  Calculated CRC: 1110/00/01/110001  Entered received CRC: 1110/00/01/10001  Data is error free.		
Outfut:  Enter data in binary: 1100/0/10/11/00/100/1  Calculated CRC: 1110/00/0/11/000/1  Entered received CRC:-11/0/00/10/11/000/1  Data is error free.		
Outfut:  Enter data in binary: 1100/0/10/11/00/100/1  Calculated CRC: 1110/00/0/11/000/1  Entered received CRC:-11/0/00/10/11/000/1  Data is error free.		
Ordfut:  Enter data in binary: 1100/010111001001  Calculated CRC: 1110/00/01/110001  Entered secries CRC:-11/0100101110001  Data is error free.		return O
		3
		outlet:
		The letter is to
		Enter data of binary: 1100/01011100100,
		Calculated CRC: 1110100101110001
		Entered secured CRC=1110100101110001
		Data ie error free
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## Output:

Press any key to continue.

