

Lab - 7

WAP for error detecting code using

```
#include <stdio.h>
void main()
{
```

```
    char input[100], key[30], temp[30],
    quot[100], rem[30], key1[30];
    printf("Enter data");
    gets(input);
    printf("Enter key");
    gets(key);
    crc(input, key);
    crc(inp, key);
}
```

}

```
-void crc(char input, char key) {
```

```
    int keylen = strlen(key);
    int msglen = strlen(input);
    strcpy(key1, key);
    for (i = 0; i < keylen; i++)
        temp[i] = input[i];
    for (i = 0; i < msglen; i++) {
        quot[i] = temp[0];
        if (quot[i] == 0)
            for (j = 0; j < keylen; j++)
                key[j] = '0';
        else
```



```

for (j = 0; j < keyLen; j++)
    key[j] = key1[j];
for (j = keyLen-1; j > 0; j--) {
    if (temp[j] == key[j])
        rem[j+1] = '0';
    else
        rem[j+1] = '1';
}
rem[keyLen+1] = input[i+keyLen];
strcpy(temp, rem);
}

```

```

strcpy(rem, temp);
printf("Quotient is");
for (i = 0; i < msgLen; i++)
    printf("%c", quot[i]);
printf("Rem");
for (i = 0; i < keyLen; i++)
    printf("%c", rem[i]);
getch();
}

```

Output:-

Enter data :- 1011010101
 enter g(x) = 1010

Quotient is = 1001000100

Reminder = 000

modified = 1011010101000

checking for errors

enter data = 10100101000

$g(x) = 1010$

Remainder = 100

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