B.Sai Bharathi
192011224

CAESAR CIPHER NETWORK

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include <stdio.h>
#include <ctype.h>

#define MAXSIZE 1024

void encrypt(char*);
void decrypt(char*);

int menu();

int main(void) {

   char c, choice[2], s[MAXSIZE];

   while (1) {
      menu();

      gets(choice);

      if ((choice[0] == 'e') || (choice[0] == 'E')) {
         puts("Input text to encrypt->");
         gets(s);
         encrypt(s);
      } else if ((choice[0] == 'd') || (choice[0] == 'D')) {
         puts("Input text to decrypt->");
         gets(s);
         decrypt(s);
      } else
         break;
   }

   return 0;
}

void encrypt(char*str) {
   int n = 0;
```

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    char *p = str, q[MAXSIZE];

    while (*p) {
        if (islower(*p)) {
            if ((*p >= 'a') && (*p < 'x'))
                q[n] = toupper(*p + (char) 3);
            else if (*p == 'x')
                q[n] = 'A';
            else if (*p == 'y')
                q[n] = 'B';
            else
                q[n] = 'C';
        } else {
            q[n] = *p;
        }
        n++;
        p++;
    }
    q[n++] = '\0';
    puts(q);
}

void decrypt(char*str) {
    int n = 0;
    char *p = str, q[MAXSIZE];

    while (*p) {
        if (isupper(*p)) {
            if ((*p >= 'D') && (*p <= 'Z'))
                q[n] = tolower(*p - (char) 3);
            else if (*p == 'A')
                q[n] = 'x';
            else if (*p == 'B')
                q[n] = 'y';
            else
                q[n] = 'z';
        } else {
            q[n] = *p;
        }
        n++;
        p++;
    }
    q[n++] = '\0';
    puts(q);
```

```
}

int menu() {
    puts("To encrypt, input e or E\n");
    puts("To decrypt, input d or D\n");
    puts("To exit, input any other letter\n");
    puts("Your choice:->\n");
    return 0;
}
```