Exercice 5.1.1

```
hosscold@hosscold-VivoBook-ASUSLaptop-X509DJ-M509D.
ktop/TI12/atelier programmation/tp5$ gcc ./exl.c -0
& ./exl
Entrez ub mot: informatique
La voyelle <i> apprait 2 fois
La voyelle <e> apprait 1 fois
La voyelle <o> apprait 1 fois
La voyelle <a> apprait 0 fois
hosscold@hosscold-VivoBook-ASUSLaptop-X509DJ-M509D:
hosscold@hosscold-VivoBook-ASUSLaptop-X509DJ-M509D:
```

```
#include <stdio.h>
#include <string.h>
void main(){
char ch[50];
int i;
int e;
int o:
int a;
int u;
int y;
int j;
i=0;
e=0;
0 = 0;
a=0;
u=0;
y=0;
i=0;
printf("Entrez ub mot: ");
scanf("%s",ch);
for (j = 0; j \le strlen(ch)-1; j++){
switch (ch[j]){
case 'e':
e++;
break;
case 'i':
i++;
break;
case 'o':
0++;
break;
case 'a':
a++;
break;
case 'u':
u++;
break;
```

```
default:
break;
}
}
printf("La voyelle <i> apprait %d fois \n",i);
printf("La voyelle <e> apprait %d fois \n",e);
printf("La voyelle <o> apprait %d fois \n",o);
printf("La voyelle <a> apprait %d fois \n",a);
printf("La voyelle <u> apprait %d fois \n",u);
printf("La voyelle <y> apprait %d fois \n",y);
}
```

Exercice 5.1.2

```
hosscold@hosscold-VivoBook-ASUSLap
ktop/TI12/atelier programmation/tp
& ./ex2
Entrez ch: AZIZA
AZIZA est palindrom
hosscold@hosscold-VivoBook-ASUSLap
ktop/TI12/atelier programmation/tp
```

```
#include <string.h>
#include <string.h>
void main(){
char ch[50];
int i;
printf("Entrez ch: ");
scanf("%s",ch);
i=0;
while (ch[i]==ch[strlen(ch)-i-1] && i<(strlen(ch)-1)/2)
{
i++;
}
ch[i]==ch[strlen(ch)-i-1] ? printf("%s est palindrom \n",ch) : printf("non palinfrome \n");
}</pre>
```

Exercice 5.1.3

```
nosscold@nosscold-vivoBook-ASUSLaptop-X509DJ-Nktop/TI12/atelier programmation/tp5$ gcc ./ex3
& ./ex3
Entrez ch: ()(hossem)
coherent
hosscold@hosscold-VivoBook-ASUSLaptop-X509DJ-Nktop/TI12/atelier programmation/tp5$
```

```
#include <stdio.h>
#include <string.h>
```

```
void main(){
char_ch[50];
int i,ma7loul,msaker;
printf("Entrez ch: ");
scanf("%s",ch);
ma7loul=0;
msaker=0;
for(i=0;i \leq =(strlen(ch)-1);i++){
switch (ch[i])
case '(':
ma7loul++;
break;
case ')':
msaker++;
break;
default:
break;
}
}
ma7loul == msaker ? printf("coherent \n") : printf("ne pas coherent \n");
```

Exercice 5.2.1

```
Entrez ch1: ab
Entrez ch2: ba
abba
hosscold@hosscold-VivoBook-ASUSLaptop-X50ktop/TI12/atelier programmation/tp5$
```

```
#include <stdio.h>
#include <stdib.h>
#include <string.h>
void main(){
    char ch1[50];
    char ch2[50];

printf("Entrez ch1: ");
    gets(ch1);
    printf("Entrez ch2: ");
    gets(ch2);

if(strcmp(ch1,ch2) == 1){
    strcat(ch2,ch1);
    puts(ch2);
} else {
    strcat(ch1,ch2);
```

```
puts(ch1);
}
```

Exercice 5.2.2

```
entre ch: HOSSEM
IPTTFN
hosscold@hosscold-VivoBook-ASUSL
ktop/TI12/atelier programmation/
```

```
#include <stdio.h>
#include <stdlib.h>
#include <string.h>
void main(){
char ch[50];
char ch1[] = "ABCDEFGHIJKLMNOPQRSTUVWXYZ";
int x,j;
printf("entre ch: ");
scanf("%s",ch);
for (int i = 0; i < strlen(ch); i++){}
j = -1;
do {
j++;
} while(ch[i] != ch1[j]);
ch[i]=ch1[j+1];
}
printf("%s \n",ch);
```

Exercice 5.3.1

```
entrez N= 4
Entrez une sequence ADN[0]: CAC
Entrez une sequence ADN[1]: GTG
Entrez une sequence ADN[2]: CAC
Entrez une sequence ADN[3]: GTG
Entrez une sequence ADN[4]: CAC
Le nombre doccurence CAC= 3
```

```
#include <stdio.h>
#include <string.h>
void main(){
char adn[9][4] = {"GTG","CAC","CTG","ACT", "CCT","GAG", "AGG","TCT","GCC"};
char t[50][4];
```

```
char ch1,ch2;
int n,i,j,ok,occ;
printf("entrez N= ");
scanf("%d",&n);
for (i = 0; i \le n; i++)
ok=0;
do {
printf("Entrez une sequence ADN[%d]: ",i);
scanf("%s",t[i]);
j=0;
do{
//printf("%s==%s %d\n",t[i],adn[j],strcmp(t[i],adn[j]));
if(strcmp(t[i],adn[j])==0) {
ok=1;
} else {
j++;
}while(ok==0);
}
//nombre d'occurence
occ=0;
for (int j = 0; j <= i; j++){
if(!strcmp(t[j],"CAC"))
occ++;
}
printf("Le nombre doccurence CAC= %d \n",occ);
```