

```
1  #include <stdio.h>
2  int fib(i)
3  {
4      if (i <= 1)
5          return i;
6      else
7          return (fib(i - 1) + fib(i - 2));
8  }
9  int main()
10 {
11
12     int num = 10, i;
13     for(i = 0; i < num; i++){
14         printf("%d ", fib(i));
15     }
16 }
17 }
```

```
C:\Users\bored\AppData\Local\Microsoft\Windows\INetCache\IE\NCWYBF92\DAALAB_1_Fib[1].exe
0 1 1 2 3 5 8 13 21 34
-----
Process exited after 0.2897 seconds with return value 0
Press any key to continue . . .
```

```
1 #include<stdio.h>
2 #include<math.h>
3 int check_ArmstrongNumber(int num)
4 {
5     if(num>0)
6         return (pow(num%10,3) +check_ArmstrongNumber(num/10));
7 }
8 int main()
9 {
10    int num;
11    printf("Enter a number:");
12    scanf("%d",&num);
13    if(check_ArmstrongNumber(num)==num)
14        printf("It is an Armstrong Number");
15    else
16        printf("It is not an Armstrong Number");
17 }
```

```
C:\Users\bored\AppData\Local\Microsoft\Windows\INetCache\IE\NCWYBF92\DAARMSTRONG[1].exe
Enter a number:153
It is an Armstrong Number
-----
Process exited after 5.557 seconds with return value 25
Press any key to continue . . .
```

```
1 #include <stdio.h>
2 int hcf(int n1, int n2);
3 int main() {
4     int n1, n2;
5     printf("Enter two positive integers: ");
6     scanf("%d %d", &n1, &n2);
7     printf("G.C.D of %d and %d is %d.", n1, n2, hcf(n1, n2));
8     return 0;
9 }
10
11 int hcf(int n1, int n2) {
12     if (n2 != 0)
13         return hcf(n2, n1 % n2);
14     else
15         return n1;
16 }
```

C:\Users\bored\AppData\Local\Microsoft\Windows\INetCache\IE\9XHX31PG\DAALAB_3_GCD[1].exe

Enter two positive integers: 5

15

G.C.D of 5 and 15 is 5.

Process exited after 3.746 seconds with return value 0

Press any key to continue . . .

```
1 #include <stdio.h>
2 int main() {
3     int arr[]={23,87,90,0,65};
4     int n=sizeof(arr)/sizeof(arr[0]);
5     for (int i = 1; i < n; ++i) {
6         if (arr[0] < arr[i]) {
7             arr[0] = arr[i];
8         }
9     }
10    printf("Largest element = %d", arr[0]);
11    return 0;
12 }
```

C:\Users\DELL\Documents\Untitled1.exe

Largest element = 90

Process exited after 0.114 seconds with return value 0

Press any key to continue . . .

```
1 #include<stdio.h>
2 int fact(int n){
3     if(n<=1){
4         return 1;
5     }
6     else{
7         return(n*fact(n-1));
8     }
9 }
10 int main(){
11     int n;
12     scanf("%d",&n);
13     printf("%d",fact(n));
14     return 0;
15 }
```

```
C:\Users\bored\AppData\Local\Microsoft\Windows\INetCache\IE\EXHD2PYL\DAALAB_5_Fact[1].exe
3
6
-----
Process exited after 2.172 seconds with return value 0
Press any key to continue . . .
```

```
1  |
2  #include <stdio.h>
3
4  void copy(char [], char [], int);
5
6  int main()
7  {
8      char str1[20], str2[20];
9
10     printf("Enter string to copy: ");
11     scanf("%[^\\n]s", str1);
12     copy(str1, str2, 0);
13     printf("Copying success.\n");
14     printf("The first string is: %s\\n", str1);
15     printf("The second string is: %s\\n", str2);
16     return 0;
17 }
18
19 void copy(char str1[], char str2[], int index)
20 {
21     str2[index] = str1[index];
22     if (str1[index] == '\\0')
23     {
24         return;
25     }
26     copy(str1, str2, index + 1);
27 }
```

```
C:\Users\bored\AppData\Local\Microsoft\Windows\INetCache\IE\NCWYBF92\DAALAB_6_Copy_string[1].exe
Enter string to copy: geeks
Copying success.
The first string is: geeks
The second string is: geeks
-----
Process exited after 7.312 seconds with return value 0
Press any key to continue . . .
```

```
1 #include <stdio.h>
2 void reverseSentence();
3 int main() {
4     printf("Enter a sentence: ");
5     reverseSentence();
6     return 0;
7 }
8
9 void reverseSentence() {
10     char c;
11     scanf("%c", &c);
12     if (c != '\n') {
13         reverseSentence();
14         printf("%c", c);
15     }
16 }
17
```

```
C:\Users\bored\AppData\Local\Microsoft\Windows\INetCache\IE\DGCKSZAE\DAALAB_7_Reverse_string[1].exe
Enter a sentence: geeks
skeeg
-----
Process exited after 4.241 seconds with return value 0
Press any key to continue . . .
```

```
1 #include<stdio.h>
2 #include<math.h>
3 int CheckPrime(int i,int num)
4 {
5     if(num==i)
6         return 0;
7     else
8         if(num%i==0)
9             return 1;
10    else{
11        return CheckPrime(i+1,num);
12    }
13 }
14 int main()
15 {
16     int n,i;
17     printf("Enter the N Value:");
18     scanf("%d",&n);
19     printf("Prime Number Between 1 to n are: ");
20     for(i=2;i<=n;i++)
21         if(CheckPrime(2,i)==0)
22             printf("%d ",i);
23 }
```

```
C:\Users\bored\AppData\Local\Microsoft\Windows\INetCache\IE\9XHX31PG\DAALAB_8_Prime_sequence[1].exe
Enter the N Value:10
Prime Number Between 1 to n are: 2 3 5 7
-----
Process exited after 3.547 seconds with return value 10
Press any key to continue . . .
```

```
1 #include<stdio.h>
2 int CheckPrime(int i,int num)
3 {
4     if(num==i)
5         return 0;
6     else
7         if(num%i==0)
8             return 1;
9     else{
10         return CheckPrime(i+1,num);
11     }
12 }
13 int main()
14 {
15     int num = 11;
16     if(CheckPrime(2,num)==0)
17         printf("It is a Prime Number.");
18     else
19         printf("It is not a Prime Number.");
20 }
```

```
C:\Users\bored\AppData\Local\Microsoft\Windows\INetCache\IE\EXHD2PYL\DAALAB_9_Prime[1].exe
It is a Prime Number.
-----
Process exited after 0.2879 seconds with return value 21
Press any key to continue . . .
```

```
1 #include <stdio.h>
2 #include <string.h>
3 int isPalindrome(char str[], int start, int end) {
4     if(start >= end)
5         return 1;
6     if(str[start] != str[end])
7         return 0;
8     return isPalindrome(str, start+1, end-1);
9 }
10 int main() {
11     char str[100];
12
13     printf("Enter a string: ");
14     fgets(str, sizeof(str), stdin);
15
16     int len = strlen(str) - 2;
17
18     if(isPalindrome(str, 0, len))
19         printf("%s is a Palindrome.\n", str);
20     else
21         printf("%s is not a Palindrome.\n", str);
22
23     return 0;
24 }
```

```
C:\Users\bored\AppData\Local\Microsoft\Windows\INetCache\IE\NCWYBF92\DAALAB_10_Palindrome[1].exe
Enter a string: malayalam
malayalam
is a Palindrome.

-----
Process exited after 15.07 seconds with return value 0
Press any key to continue . . .
```