

C-PROGRAMMING

CEQ1

Pagidala Madeena
192211011

Sample Input:
String: TEMPLE
Sample Output:
Reverse String: ELPMET

CSA02

```
1. #include <stdio.h>
2.
3. int main()
4. {
5.     int n, reverse = 0, remainder;
6.
7.     printf("enter an integer");
8.     scanf("%d", &n);
9.
10.    while (n!=0){
11.        remainder = n%10;
12.        reverse = reverse * 10 + remainder;
13.        n/=10;
14.    }
15.
16.    printf("reversed number = %d", reverse);
17.    return 0;
18. }
```

123

enter an integerreversed number = 321

Logout

CEQ10

```
1. #include <stdio.h>
2. int main ()
3. {
4.     int M = 50;
5.     int N = 100;
6.     int K = 7;
7.     if (M<N)
8.         for (int i=N; i>=M; i-=K+1)
9.         {
10.            printf ("%d ",i);
11.        }
12.    return 0;
13. }
```

Your Input Goes Here....!!!

100 92 84 76 68 60 52

Logout



Edit with WPS Office

CEQ11

The screenshot shows the SIMATS C IDE interface. The top toolbar includes buttons for 'C', 'Run', 'Save', and 'Logout'. The main editor displays a C program for matrix addition. The program defines two 2x2 matrices, mat1 and mat2, and calculates their sum, res. The sample input shows mat1 as [[1, 2], [5, 3]] and mat2 as [[2, 3], [4, 1]]. The sample output shows the result as [[3, 5], [9, 4]]. The right sidebar contains a list of questions, with CEQ11 selected. The bottom status bar shows the system time as 13:44 on 04-04-2023.

```
1. #include <stdio.h>
2. int main ()
3. {
4.     int mat1 [2][2] = {{1,2},{5,3}};
5.     int mat2 [2][2] = {{2,3},{4,1}};
6.     int res [2][2];
7.     for (int i=0; i<2;i++){
8.         for (int j=0; j<2;j++){
9.             res[i][j] = mat1[i][j] + mat2[i][j];
10.        }
11.    }
12.    printf ("Result:\n");
13.    for (int i=0; i<2; i++){
14.        for (int j=0; j<2; j++){
15.            printf ("%d ",res[i][j]);
16.        }
17.        printf("\n ");
18.    }
19.    return 0;
20. }
```

Sample Input:
Mat1 = 1 2
5 3
Mat2 = 2 3
4 1

Sample Output:
Mat Sum = 3 5
9 4

Your Input Goes Here....!!!

Result:
3 5
9 4

CEQ12

The screenshot shows the SIMATS C IDE interface. The top toolbar includes buttons for 'C', 'Run', 'Save', and 'Logout'. The main editor displays a C program to print a rectangle symbol pattern. The program takes an integer N as input and prints a pattern of asterisks. The sample input is 5, and the sample output is a 5x5 grid of asterisks. The right sidebar contains a list of questions, with CEQ12 selected. The bottom status bar shows the system time as 13:52 on 04-04-2023.

```
1. #include <stdio.h>
2. int main ()
3. {
4.     int N=5,i,j;
5.     for(i=1;i<=N;i++)
6.     {
7.         for (j=1;j<=N;j++)
8.         {
9.             printf("*");
10.        }
11.        printf("\n");
12.    }
13.    return 0;
14. }
```

Write a program to print rectangle symbol pattern.
Get the symbol as input from user.

Your Input Goes Here....!!!



Edit with WPS Office

Write a program for matrix multiplication?

Sample Input:

```
Mat1 = 1 2
      5 3
Mat2 = 2 3
      4 1
```

Sample Output:

```
Mat Sum = 10 5
          22 18
```

C
Run
Save

```

1. #include <stdio.h>
2. int main() {
3.     int a[2][2]={{1,2},{5,3}};
4.     int b[2][2]={{2,3},{4,1}};
5.     int c[2][2]={0};
6.     for (int i=0; i<2; i++)
7.         for (int j=0; j<2; j++)
8.             for (int k=0; k<2; k++)
9.                 c[i][j]+=a[i][k]*b[k][j];
10.    printf("a*b= \n");
11.    for (int i=0; i<2; i++) {
12.        for (int j=0; j<2; j++)
13.            printf(" %d ", c[i][j]);
14.        printf("\n");
15.    }
16.    return 0;

```

Your Input Goes Here...!!

a+b=
9 7
14 12

```

1. #include <stdio.h>
2. #include <string.h>
3. #define max_names 100
4. #define max_name_length 50
5.
6. int main() {
7.     char names [max_names]
8.     [max_name_length];
9.     int n;
10.    printf("enter the number of names:");
11.    scanf("%d",&n);
12.    printf("enter %d names:\n",n);
13.    for(int i=0;i<n;i++){
14.        for(int j=0;j<n-i-1;j++){
15.            if(strcmp(names[j],names[j+1])>0){
16.                char temp[max_name_length];
17.                strcpy(temp,names[j]);
18.                strcpy(names[j],names[j+1]);
19.                strcpy(names[j+1],temp);
20.            }
21.        }
22.    }
23.    printf("\nnames in ascending alphabetical order:\n");
24.    for(int i=0;i<n;i++){
25.        printf("%s\n",names[i]);
26.    }
27.    return 0;

```

Your Input Goes Here...!!!

```

<pre>ExecutionFolder/192211166.c:
In function 'main':
ExecutionFolder/192211166.c:7:13:
error: 'max' undeclared (first use in this
function)
    7 | char names [max-names]
      |           ^~~~
ExecutionFolder/192211166.c:7:13:
note: each undeclared identifier is
reported only once for each function it
appears in
ExecutionFolder/192211166.c:7:17:

```



RunSaveLogout

```
#include<stdio.h>
#include<ctype.h>
int main() {
    char s[100];
    int count_alpha =0,count_digit=0,count_special=0;
    printf("enter a string: ");
    fgets(s,100,stdin);
    for(int i=0; s[i]!='\0'; i++) {
        if (isalpha(s[i]))
            count_alpha++;
        if(isdigit(s[i]))
            count_digit++;
        else if (isspace(s[i]))
            count_special++;
    }
    printf("number of alphabets:%d\n",count_alpha);
    printf("number of digits:%d\n",count_digit);
    printf("number of special:%d\n",count_special);

    return 0;
}
```

abc!@ 12 cd 1212

enter a string: number of alphabets:0

CCQ15

Write a program to print the following pattern

Sample Input:
Enter the number to be printed: 1
Max Number of time printed: 3
1
1 1
1 1 1
1 1
1

CRunSave

```
1. #include <stdio.h>
2. int main() {
3.     int size = 3;
4.     for (int i=1; i<= size; i++) {
5.         for (int j=0; j<i; j++) {
6.             printf(" 1 ");
7.         }
8.         printf(" \n ");
9.     }
10.    for (int i=1; i<=size-1; i++) {
11.        for (int j=0; j<size-i; j++) {
12.            printf(" 1 ");
13.        }
14.        printf(" \n ");
15.    }
16.    return 0;
}
```

Your Input Goes Here

1
1 1
1 1 1



CCQ17

```

1. #include<stdio.h>
2. void main()
3. {
4.     int i,j,limit;
5.     int comp=0;
6.     printf("enter limit:\n");
7.     scanf("%d",&limit);
8.     printf("comp nums upto %d:\n",limit);
9.     for(i=2;i<=limit;i++)
10.    {
11.        comp=0;
12.        for(j=1-1;j>1;j--)
13.        {
14.            if(i%j==0)
15.                comp=1;
16.        }
17.        if(comp==1)
18.            printf("%d\t",i);
19.        printf("\n");
20.    }
21. }

```

12

enter limit:
comp nums upto 19:
4 6 8 9 10 12 14 15 16 18

CCQ.18

```

1. #include<stdio.h>
2. int main() {
3.     int height;
4.     printf("enter the height of the inverted pyramid:\n");
5.     scanf("%d",&height);
6.     for(int i=height; i>=1;i--){
7.         for(int j=height-i;j>0;j--){
8.             printf(" ");
9.         }
10.        for(int k=2*i-1;k>0;k--){
11.            printf("*");
12.        }
13.        printf("\n");
14.    }
15.    return 0;
16. }

```

5

enter the height of the inverted pyramid:

**
*



Edit with WPS Office