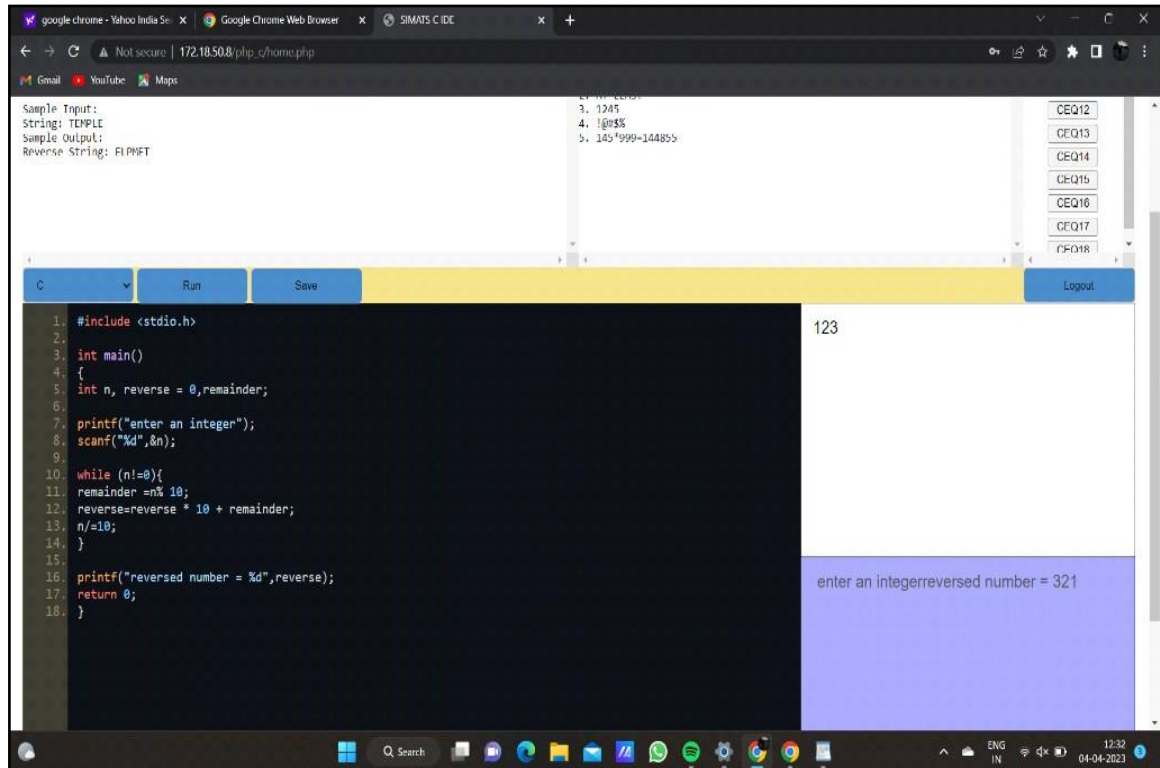


DAY-1 C PROGRAMMING

MADEENA.P

192211011

CEQ1



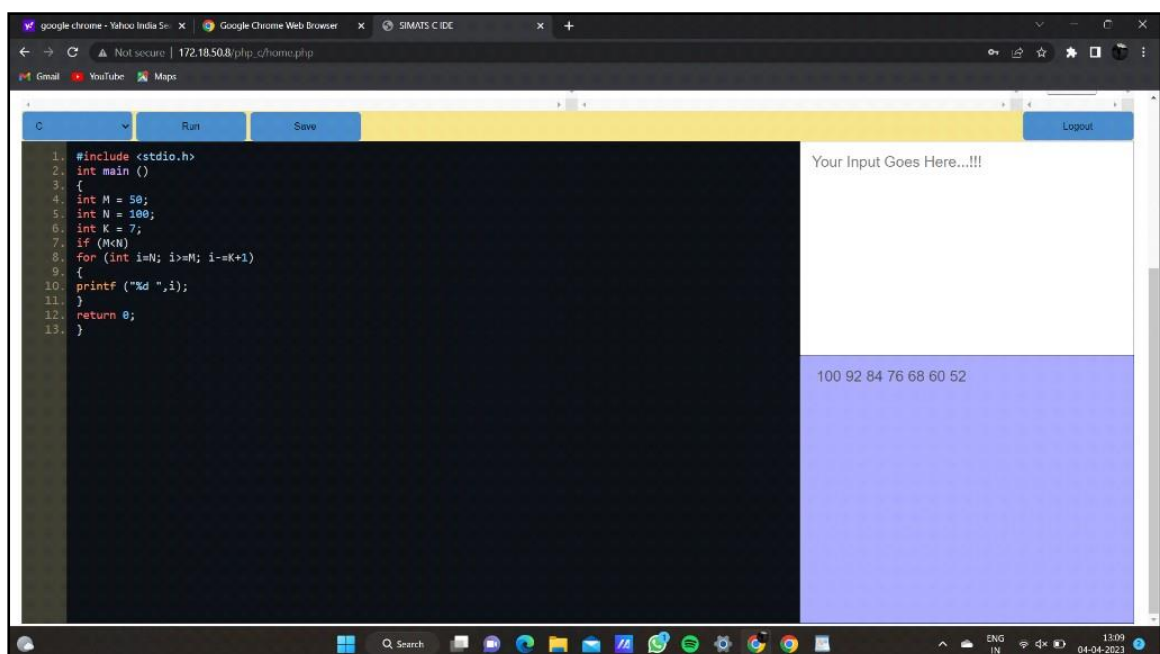
Sample Input:
String: TEMPLE
Sample Output:
Reverse String: ELPMET

```
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

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



CEQ11

The screenshot shows a web browser window with a C IDE. The browser tabs include 'google chrome - Yahoo India Se...', 'Google Chrome Web Browser', and 'SIMATS C IDE'. The address bar shows 'Not secure | 172.18.50.8/php_c/home.php'. The IDE interface has a menu bar with 'C', 'Run', 'Save', and 'Logout'. The main editor area contains the following C code:

```
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], i, j;
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. }
```

On the right side of the IDE, there is a sidebar with a list of questions: CEQ11 (highlighted), CEQ12, CEQ13, CEQ14, CEQ15, CEQ16, CEQ17, and CEQ18. Below the list, there is a text area labeled 'Your Input Goes Here...!!!' and a blue box displaying the output:

```
Result:
3 5
9 4
```

CEQ12

The screenshot shows the same web browser window with the C IDE. The browser tabs and address bar are the same. The IDE interface is the same. The main editor area contains the following C code:

```
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.                 printf("*");
9.             }
10.            printf("\n");
11.        }
12.    }
13.    return 0;
14. }
```

On the right side of the IDE, the sidebar with the list of questions (CEQ11 to CEQ18) is visible. Below the list, the text area labeled 'Your Input Goes Here...!!!' is empty. The blue box displays the output of the program:

```
*****
*****
*****
*****
*****
```



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
```

```
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:
error: 'max' undeclared (first use in
```



```
Run Save Logout
#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

CEQ15

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
```

C Run Save

```
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
```



CEQ17

```

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=i-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

CEQ.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:

**
*

