

DAY-2 C PROGRAMMING PRACTICE

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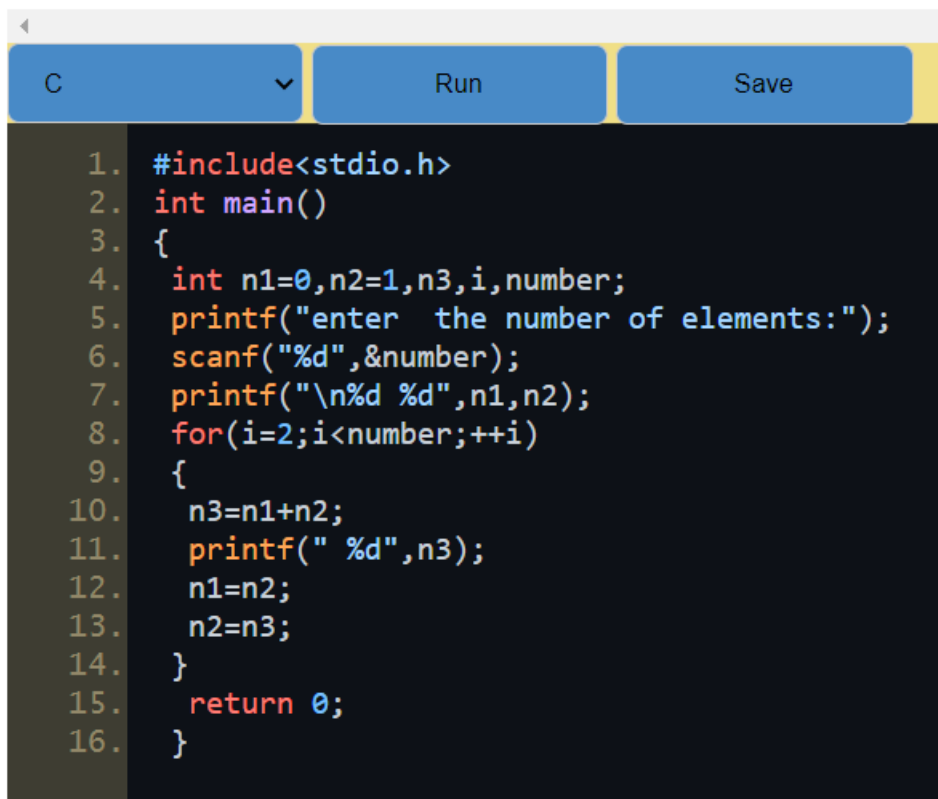
1.

Questions
CEQ28.

Write a program to print the Fibonacci series.

Sample Input:
Enter the n value: 6

Sample Output:
0 1 1 2 3 5



```
1. #include<stdio.h>
2. int main()
3. {
4.     int n1=0,n2=1,n3,i,number;
5.     printf("enter the number of elements:");
6.     scanf("%d",&number);
7.     printf("\n%d %d",n1,n2);
8.     for(i=2;i<number;++i)
9.     {
10.        n3=n1+n2;
11.        printf(" %d",n3);
12.        n1=n2;
13.        n2=n3;
14.    }
15.    return 0;
16. }
```

6

enter the number of elements:
0 1 1 2 3 5

2.

Questions

CEQ29.

Write a program to print the below pattern.

```
1
2 2
3 3 3
4 4 4 4
```

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

4

```
1
2 2
3 3 3
4 4 4 4
```

3.

Questions

CEQ35.

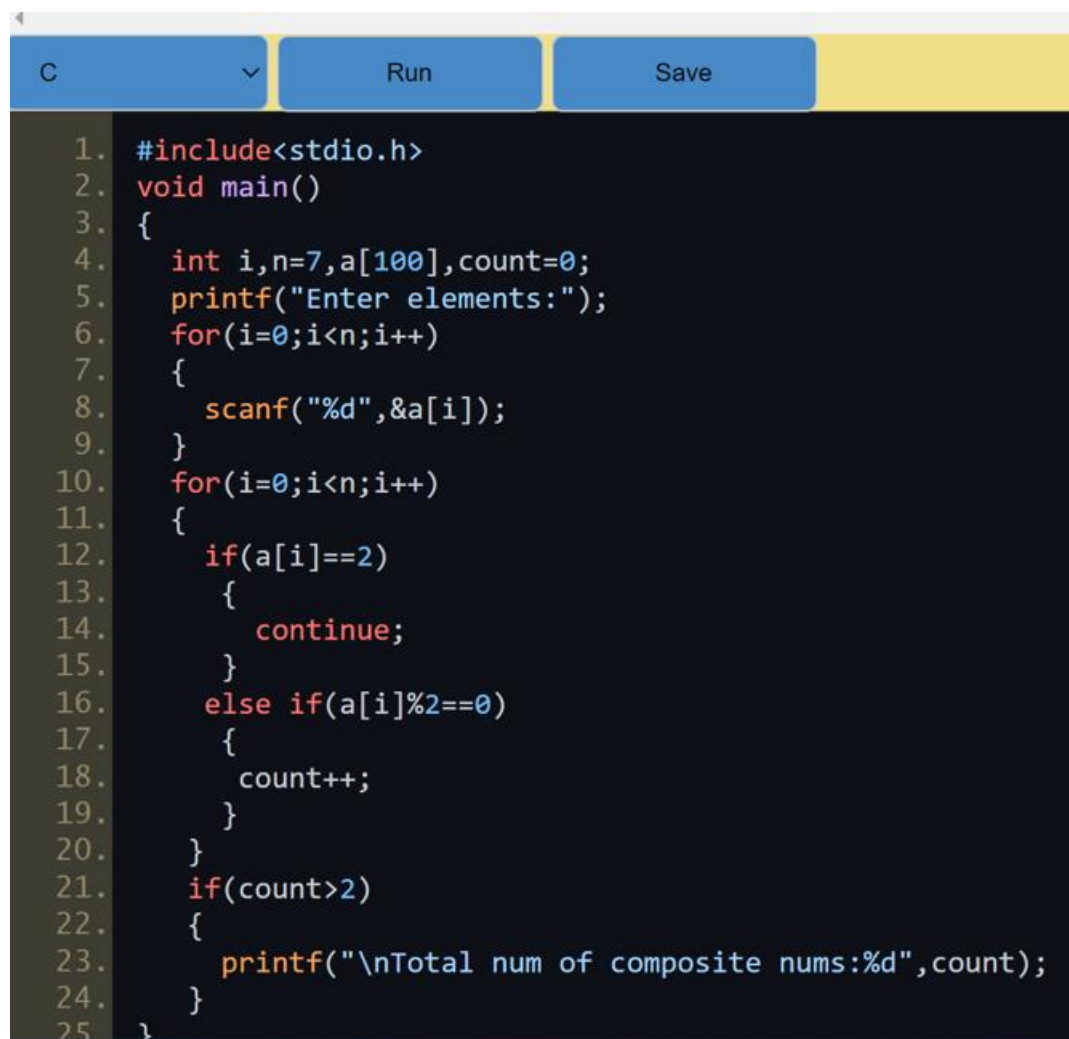
Write a program to find the number of composite numbers in an array of elements

Sample Input::

Array of elements = {16, 18, 27, 16, 23, 21, 19}

Sample Output:

Number of Composite Numbers = 5



```
1. #include<stdio.h>
2. void main()
3. {
4.     int i,n=7,a[100],count=0;
5.     printf("Enter elements:");
6.     for(i=0;i<n;i++)
7.     {
8.         scanf("%d",&a[i]);
9.     }
10.    for(i=0;i<n;i++)
11.    {
12.        if(a[i]==2)
13.        {
14.            continue;
15.        }
16.        else if(a[i]%2==0)
17.        {
18.            count++;
19.        }
20.    }
21.    if(count>2)
22.    {
23.        printf("\nTotal num of composite nums:%d",count);
24.    }
25. }
```

16
18
27
16
23
21
19

Enter elements:
Total num of composite nums:3

4.

.

Questions

CEQ33.

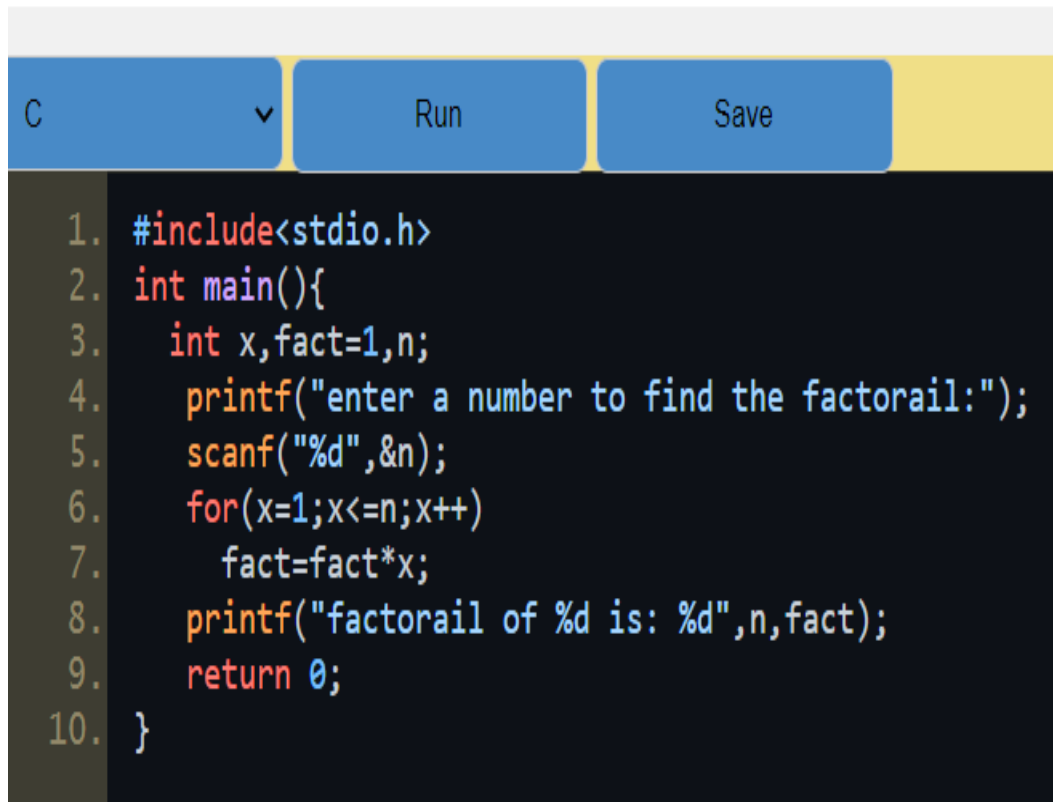
Find the factorial of n?

Sample Input:

N = 6

Sample Output:

6 Factorial = 720



The image shows a code editor window with a dark background. At the top, there is a toolbar with three buttons: 'C' (with a dropdown arrow), 'Run', and 'Save'. Below the toolbar, the code is written in a light blue font. The code is a C program to calculate the factorial of a number. It includes the standard input/output header, defines the main function, declares variables for the number and the factorial, prompts the user for input, reads the input, calculates the factorial using a for loop, and prints the result.

```
1. #include<stdio.h>
2. int main(){
3.     int x,fact=1,n;
4.     printf("enter a number to find the factorail:");
5.     scanf("%d",&n);
6.     for(x=1;x<=n;x++)
7.         fact=fact*x;
8.     printf("factorail of %d is: %d",n,fact);
9.     return 0;
10. }
```

6

enter a number to find the factorail:factorail of
6 is: 720

5.

Questions

CEQ30.

Write a program to find the square, cube of the given decimal number.

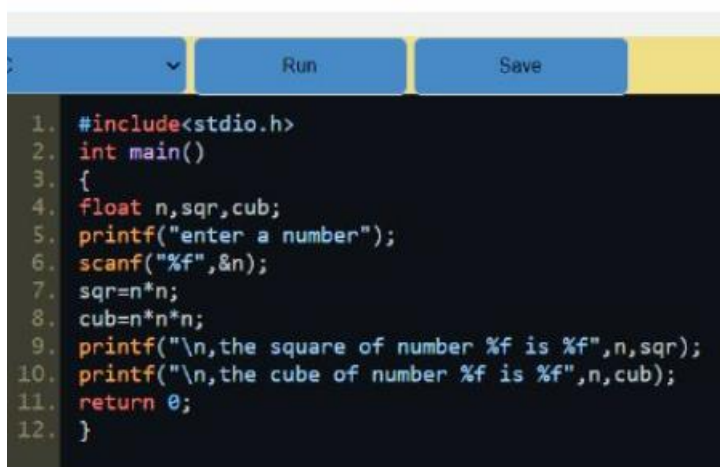
Sample Input:

Given Number: 0.6

Sample Output:

Square Number: 0.36

Cube Number:0.216



```
1. #include<stdio.h>
2. int main()
3. {
4.     float n,sqr,cub;
5.     printf("enter a number");
6.     scanf("%f",&n);
7.     sqr=n*n;
8.     cub=n*n*n;
9.     printf("\n,the square of number %f is %f",n,sqr);
10.    printf("\n,the cube of number %f is %f",n,cub);
11.    return 0;
12. }
```

0.6



```
enter a number
,the square of number 0.600000 is 0.360000
,the cube of number 0.600000 is 0.216000
```

6.

Questions

CEQ32.

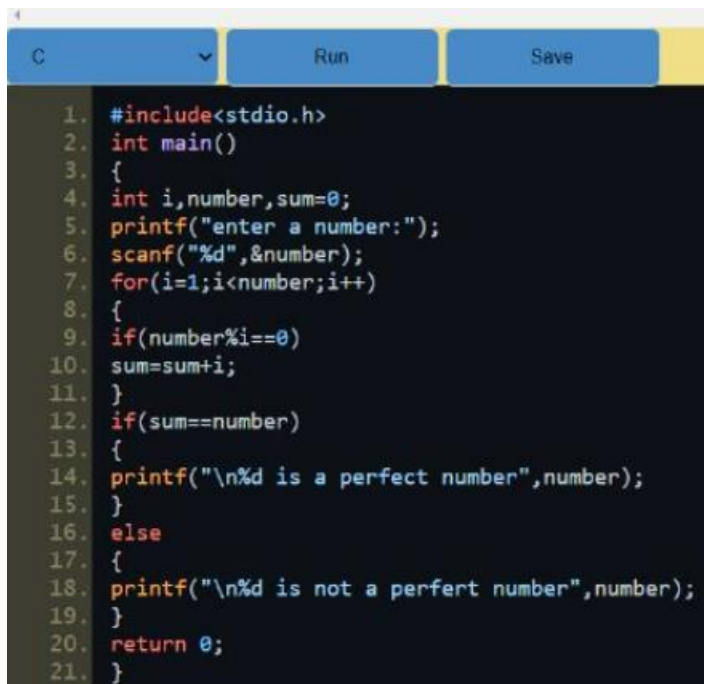
Write a program to print the given number is Perfect number or not?

Sample Input:

Given Number: 6

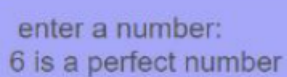
Sample Output:

It's a Perfect Number



```
1. #include<stdio.h>
2. int main()
3. {
4.     int i,number,sum=0;
5.     printf("enter a number:");
6.     scanf("%d",&number);
7.     for(i=1;i<number;i++)
8.     {
9.         if(number%i==0)
10.            sum=sum+i;
11.     }
12.     if(sum==number)
13.     {
14.         printf("\n%d is a perfect number",number);
15.     }
16.     else
17.     {
18.         printf("\n%d is not a perfert number",number);
19.     }
20.     return 0;
21. }
```

6



```
enter a number:
6
6 is a perfect number
```

7.

Questions

CEQ3.

Write a program to reverse a number using loop?(Get the input from user)

Sample Input:

Number: 14567

Sample Output:

Reverse Number: 76541

```
1. #include <stdio.h>
2. #include<stdlib.h>
3. int main()
4. {
5.     int num,rem,reverse=0;
6.     printf("enter the number for find reverse\n");
7.     scanf("%d",&num);
8.     printf("you entered %d\n",num);
9.     for(;num!=0; num=num/10)
10.    {
11.        rem=num%10;
12.        reverse=reverse*10+rem;
13.    }
14.    printf("reverse of the given number %d",reverse);
15.    return 0;
16. }
```

14567

```
enter the number for find reverse
you entered 14567
reverse of the given number 76541
```


8.

Questions

CEQ36.

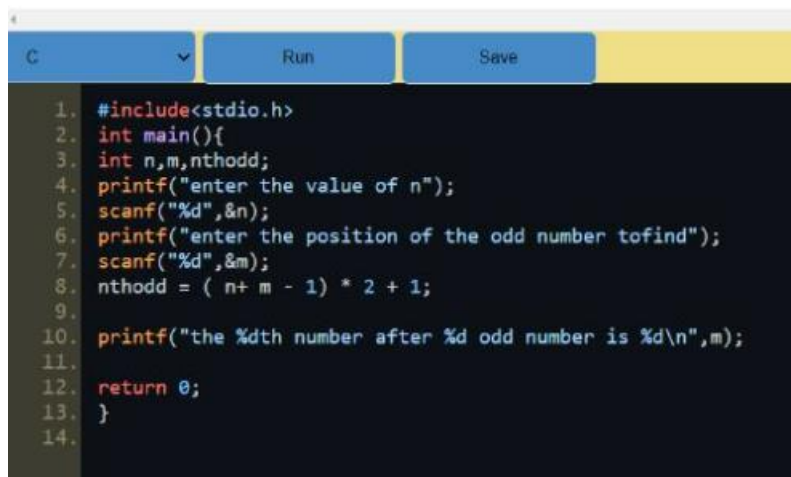
Find the nth odd number after n odd number.

Sample Input:

N : 4

Sample Output:

4th Odd number after 4 odd numbers = 15



```
1. #include<stdio.h>
2. int main(){
3.     int n,m,nthodd;
4.     printf("enter the value of n");
5.     scanf("%d",&n);
6.     printf("enter the position of the odd number tofind");
7.     scanf("%d",&m);
8.     nthodd = ( n+ m - 1 ) * 2 + 1;
9.
10.    printf("the %dth number after %d odd number is %d\n",m);
11.
12.    return 0;
13. }
14.
```

9.

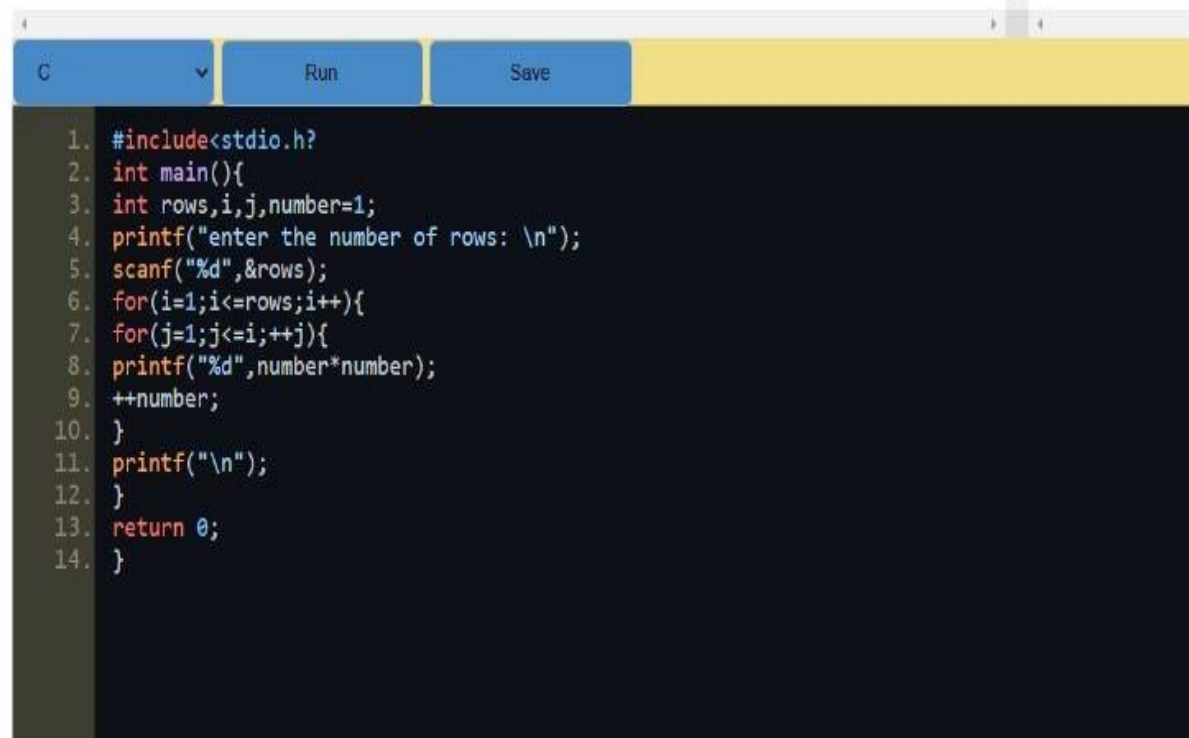
Questions

CEQ34.

Test Cases

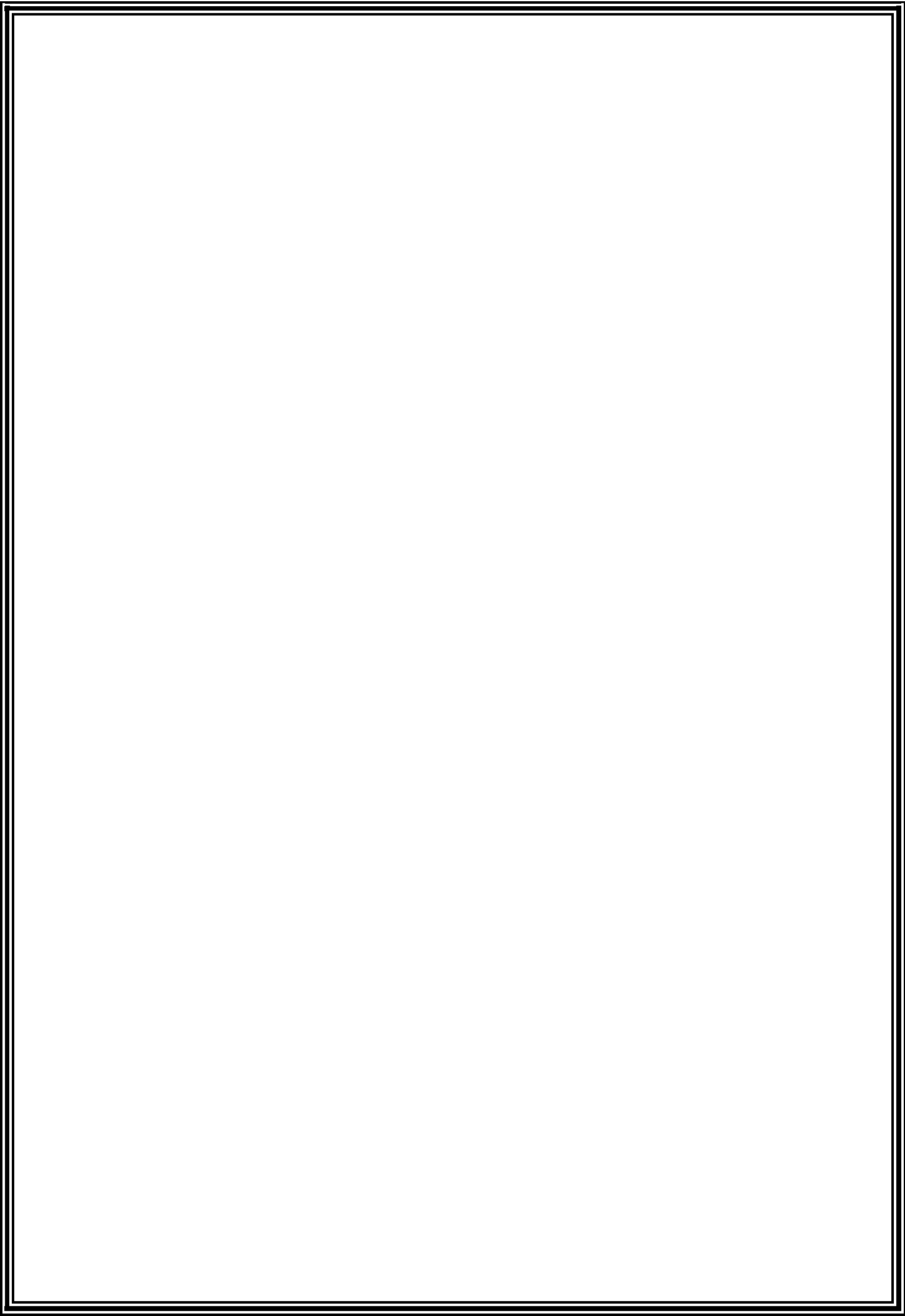
Write a program to print the below pattern.

```
1
4   9
16  25  36
49  64  81  100
```



The screenshot shows a C programming IDE with a dark theme. The code is as follows:

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



DAY-3 AN PROGRAMS

1.

Questions

CEQ37.

Write a program that finds whether a given character is present in a string or not. In case it is present it prints the index at which it is present. Do not use built-in find functions to search the character.

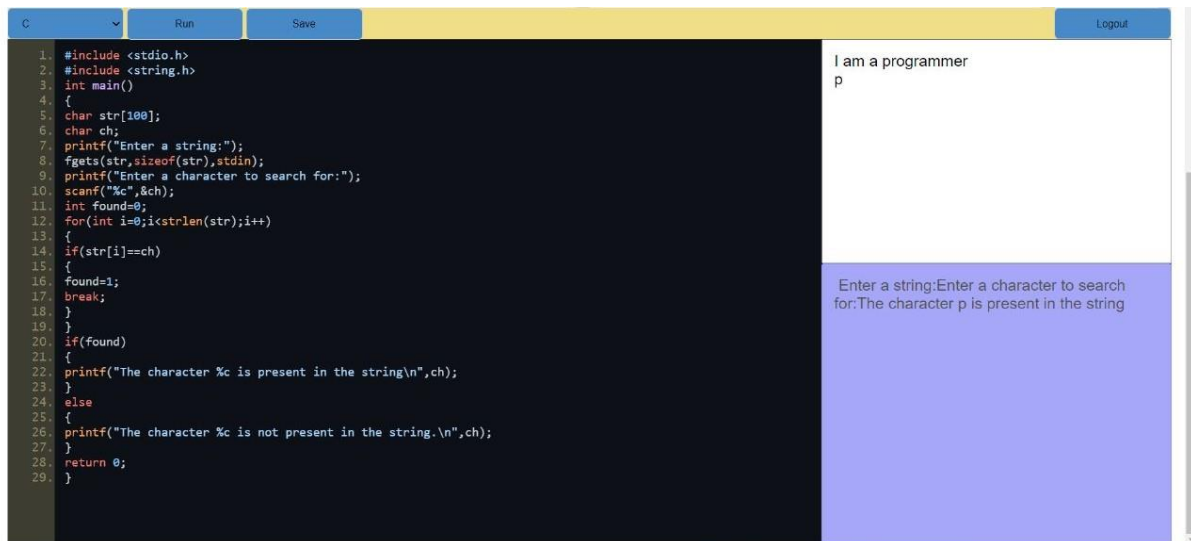
Sample Input:

Enter the string: I am a programmer
Enter the character to be searched: p

Sample Output:

P is found in string at index: 8

Note: Check for non-available Character in the given statement as Hidden Test case.



The screenshot shows a C programming IDE with a dark theme. The code is as follows:

```
1. #include <stdio.h>
2. #include <string.h>
3. int main()
4. {
5.     char str[100];
6.     char ch;
7.     printf("Enter a string:");
8.     fgets(str,sizeof(str),stdin);
9.     printf("Enter a character to search for:");
10.    scanf("%c",&ch);
11.    int found=0;
12.    for(int i=0;i<strlen(str);i++)
13.    {
14.        if(str[i]==ch)
15.        {
16.            found=1;
17.            break;
18.        }
19.    }
20.    if(found)
21.    {
22.        printf("The character %c is present in the string\n",ch);
23.    }
24.    else
25.    {
26.        printf("The character %c is not present in the string.\n",ch);
27.    }
28.    return 0;
29. }
```

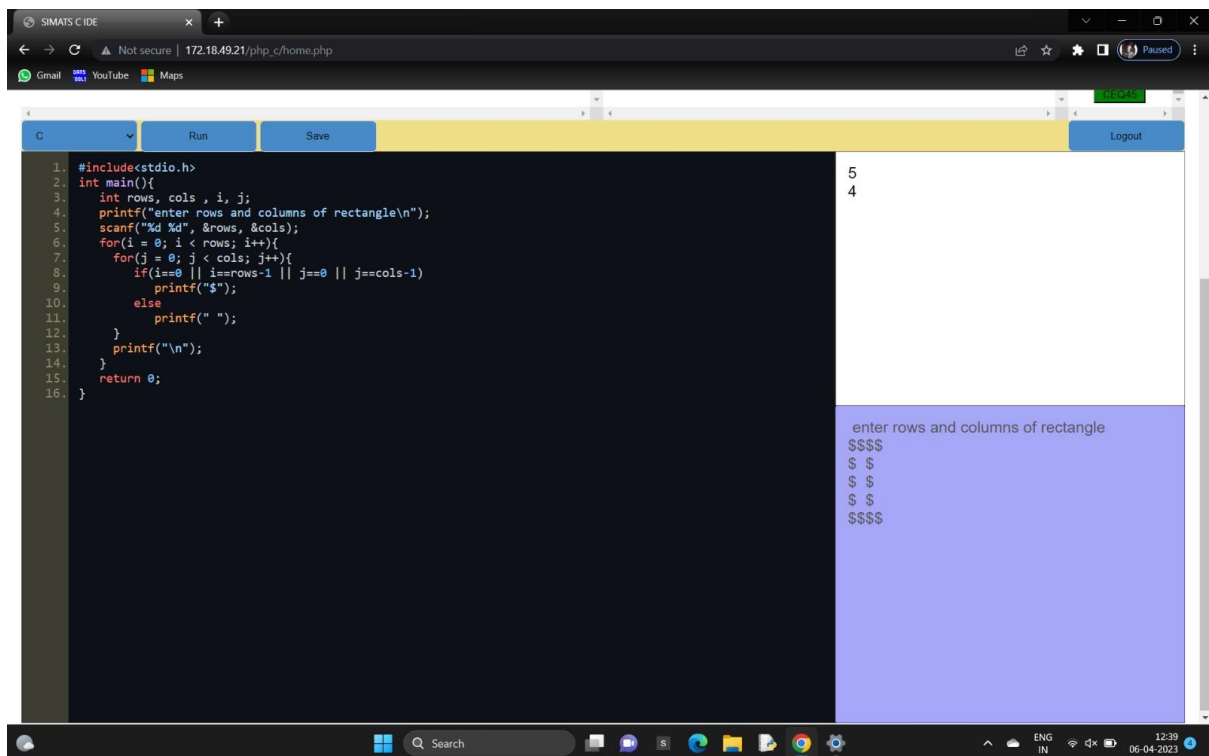
On the right side of the IDE, there is a text area showing the input and output of the program. The input is "I am a programmer" and "p". The output is "Enter a string:Enter a character to search for:The character p is present in the string".

2.

Questions

CEQ42.

Write a program to print hollow Rectangle Dollar pattern?



The screenshot shows a web-based C IDE named SIMATS C IDE. The browser address bar shows the URL 172.18.49.21/php_c/home.php. The IDE interface includes a menu bar with 'C', 'Run', 'Save', and 'Logout'. The main area is split into a code editor on the left and an output console on the right. The code editor contains a C program that prompts the user for the number of rows and columns, then prints a hollow rectangle using dollar signs (\$). The output console shows the user input '5' for rows and '4' for columns, followed by the printed pattern: a 5x4 grid of dollar signs with the interior cells being empty.

```
1. #include<stdio.h>
2. int main(){
3.     int rows, cols , i, j;
4.     printf("enter rows and columns of rectangle\n");
5.     scanf("%d %d", &rows, &cols);
6.     for(i = 0; i < rows; i++){
7.         for(j = 0; j < cols; j++){
8.             if(i==0 || i==rows-1 || j==0 || j==cols-1)
9.                 printf("$");
10.            else
11.                printf(" ");
12.        }
13.        printf("\n");
14.    }
15.    return 0;
16. }
```

5
4

enter rows and columns of rectangle
\$\$\$\$
\$ \$
\$ \$
\$ \$
\$ \$
\$ \$\$\$

3.

Questions

CEQ39.

Program to find whether the given number is Armstrong number or not

Sample Input:

Enter number : 153

Sample Output:

Given number is Armstrong number

Questions

CEQ39.

Program to find whether the given number is Armstrong number or not

Sample Input:

Enter number : 153

Sample output:

Given number is Armstrong number

Test Cases

1. 370
2. 1
3. 371
4. 145678
5. 0,21345

CEQ37

CEQ38

CEQ39

CEQ40

CEQ41

CEQ42

CEQ43

CEQ44

CFQ45

C

Run

Save

```
1. #include<stdio.h>
2. void main()
3. {
4.     int num=153,r,sum=0,temp;
5.     printf("enter a number:");
6.     scanf("%d",&num);
7.     for(temp=num;num!=0;num=num/10)
8.     {
9.         r=num%10;
10.        sum=sum+(r*r*r);
11.    }
12.    if(sum==temp)
13.    {
14.        printf("armstrong number:");
15.    }
16.    else
17.    {
18.        printf("not armstrong number:");
19.    }
20. }
21.
```

Your Input Goes Here....!!!

enter a number:armstrong number:

Logout

4.

Questions

CEQ41.

Write a program that accepts a string from user and displays the same string after removing vowels from it.

Sample Input & Output:

Enter a string: we can play the game

The string without vowels is: w cn ply thgm

Ques 1.

Write a program that accepts a string from user and displays the same string after removing vowels from it.

Sample Input & Output:

Enter a string: we can play the game

The string without vowels is: w cn ply thgm

C

Run

Save

Logout

```
1. #include<stdio.h>
2. #include<string.h>
3. int main(){
4.     char str[100];
5.     int i,j, len = 0;
6.     printf("enter the string");
7.     scanf("%s",str);
8.     len = strlen(str);
9.     for(i = 0; i < len ; i++){
10.        if(str[i] == 'a' || str[i] == 'e' || str[i] == 'i' || str[i] == 'o' || str[i] == 'u' ||
11.           str[i] == 'A' || str[i] == 'E' || str[i] == 'I' || str[i] == 'O' || str[i] == 'U'){
12.            for (j = i; j < len; j++){
13.                str[j] = str[j + 1];
14.            }
15.            i--;
16.            len--;
17.        }
18.        str[len + 1] = '\0';
19.    }
20.    printf("after deleting the vowels will be %s",str);
21.    return 0;
```

hi

enter the string after deleting the vowels will be h

CEQ38
CEQ39
CEQ40
CEQ41
CEQ42
CEQ43
CEQ44
CEQ45

5.

Questions

CEQ44.

Write a program to find the square root of a perfect square number(print both the positive and

Sample Input:

Enter the number : 6561

Sample Output:

Square Root: 81, -81

The screenshot displays a programming practice interface. On the left, under the 'Questions' tab, question CEQ44 is listed. The question text is: 'Write a program to find the square root of a perfect square number(print both the positive and negative square root of a perfect square number)'. The sample input is 'Enter the number : 6561' and the sample output is 'Square Root: 81, -81'. In the center, the 'Test Cases' tab is active, showing a list of test cases: 1. 1225, 2. 9801, 3. 1827, 4. -100, 5. 0. On the right, a list of question IDs (CEQ37 to CEQ45) is visible, with CEQ44 highlighted in green. At the bottom, the 'C' programming language is selected. The code editor shows a C program that defines a function 'findsqrt' which returns the square root of a number. The main function calls this function with the input 6561 and prints the result. The output field shows '81.000000'.

Questions
CEQ44.

Write a program to find the square root of a perfect square number(print both the positive and negative square root of a perfect square number)

Sample Input:
Enter the number : 6561

Sample Output:
Square Root: 81, -81

Test Cases

1. 1225
2. 9801
3. 1827
4. -100
5. 0

CEQ37
CEQ38
CEQ39
CEQ4
CEQ40
CEQ41
CEQ42
CEQ43
CEQ44
CEQ45

C Run Save Logout

```
1. #include<math.h>
2. #include<stdio.h>
3. double findsqrt(double N)
4. {
5.     return sqrt(N);
6. }
7. int main()
8. {
9.     int N=6561;
10.    printf("%f",findsqrt(N));
11.    return 0;
12. }
```

Your Input Goes Here...!!!

81.000000

6.

Questions

CEQ43.

Write a program to find the sum of digits of N digit number.

Sample Input:

Enter N value : 3

Enter 3 digit number: 143

Sample Output:

Sum of 3 digit number: 8

Questions
CEQ43.

Write a program to find the sum of digits of N digit number.

Sample Input:

Enter N value : 3

Enter 3 digit number: 143

Sample Output:

Sum of 3 digit number: 8

Test Cases

1. N = 2, 158
2. N = 3, 14
3. N = 4, 0148
4. N = 1, 0004
5. N = 4, 7263

CEQ37

CEQ38

CEQ39

CEQ4

CEQ40

CEQ41

CEQ42

CEQ43

CEQ44

C

Run

Save

Logout

```
1. #include<stdio.h>
2. int main()
3. {
4.     int sum=0;
5.     int num=143;
6.     while(num!=0)
7.     {
8.         sum+=num%10;
9.         num=num/10;
10.    }
11.    printf("\n Sum:%d",sum);
12.    return 0;
13. }
```

Your Input Goes Here...!!!

Sum:8

7.

Questions

CEQ45.

Write a program to print inverted pyramid pattern.

The screenshot shows a C program in the SIMAITS C IDE. The program prompts the user to enter the number of rows, which is 4. It then prints an inverted pyramid pattern of asterisks. The pattern consists of 4 rows: the first row has 4 asterisks, the second has 3, the third has 2, and the fourth has 1. Each row is preceded by a series of spaces to form the pyramid shape.

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

enter the number of rows:4

**
*

8.

Questions

CEQ4.

Write a program to find whether the person is eligible for vote or not. And if that particular

Sample Input:
Enter your age:7

Sample output:
You are allowed to vote after 11 years

Questions
CEQ4.

Write a program to find whether the person is eligible for vote or not. And if that particular

Sample Input:
Enter your age:7

Sample output:
You are allowed to vote after 11 years

Test Cases

1. 25
2. Eighteen
3. 12
4. -18
5. 34.5

CEQ37
CEQ38
CEQ39
CEQ40
CEQ41
CEQ42
CEQ43
CEQ44
CEQ45

C

Run

Save

Logout

```
1. #include<stdio.h>
2. int main(){
3.     int age;
4.     printf("enter the age");
5.     scanf("%d",&age);
6.     if(age>=18){
7.         printf("eligible for vote");
8.     }else
9.     {
10.        printf("noteligible for voting");
11.        printf("has to wait %d years",18-age);
12.    }
13.    return 0;
14. }
15.
```

7

enter the age
noteligible for voting
has to wait 11 years

9.