DAY-4 PROGRAMS

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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

Test Cases

Test Condition: Implement negative Fibonacci series

CEQ28
CEQ29
CEQ3
CEQ30
CEQ31
CEQ32
CEQ33
CEQ34
CEQ35

C | Run | Save | Logout

```c
#include<stdio.h>
int main()
{
  int count,n,t1=0,t2=1,temp=0;
  printf("No.of terms:");
  scanf("%d",&n);
  printf("Fibonacci series:%d, %d",t1,t2);
  count=2;
  while(count<n)
  {
    temp=t1+t2;
    t1=t2;
    t2=temp;
    ++count;
    printf("%d ",temp);
  }
return 0;
}
```

6

No.of terms:Fibonacci series:0, 11 2 3 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

Test Cases

1. 12
2. 0
3. -0.5
4. 14.25
5. -296

CEQ28
CEQ29
CEQ3
CEQ30
CEQ31
CEQ32
CEQ33
CEQ34
CEQ35
CEQ36

C | Run | Save | Logout

```c
#include<stdio.h>
int main()
{
float n,sqr,cub;
printf("enter a number");
scanf("%f",&n);
sqr=n*n;
cub=n*n*n;
printf("\n,the square of number %f is %f",n,sqr);
printf("\n,the cube of number %f is %f",n,cub);
return 0;
}
```

0.6

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

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.Array of elements = {26, 28, 37, 26, 33, 31, 29}
2. Array of elements = {1.6, 1.8, 2.7, 1.6, 2.3, 2.1, .19}
3. Array of elements = {0, 160, 180, 270, 160, 230, 210, 190, 0}
4. Array of elements = {200, 180, 180, 270, 270, 270, 190, 200}
5. Array of elements = {100, 100, 100, 100, 100, 100, 100, 100}

CEQ3
CEQ30
CEQ31
CEQ32
CEQ33
CEQ34
CEQ35
CEQ36

C | Run | Save | Logout

```c
#include<stdio.h>
void main()
{
  int i,n=7,a[100],count=0;
  printf("Enter elements:");
  for(i=0;i<n;i++)
  {
    scanf("%d",&a[i]);
  }
  for(i=0;i<n;i++)
  {
    if(a[i]==2)
     {
       continue;
     }
    else if(a[i]%2==0)
     {
      count++;
     }
   }
   if(count>2)
   {
     printf("\nTotal num of composite nums:%d",count);
   }
}
```

16
18
27
16
23
21
19

Enter elements:
Total num of composite nums:3

Questions

CEQ29.

Write a program to print the below pattern.

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

Questions
CEQ33.

Find the factorial of n?

Sample Input:
N = 6

Sample Output:
6 Factorial = 720

Test Cases

1. N = 0
2. N = -5
3. N = 1
4. N = Q
5. N = 3A

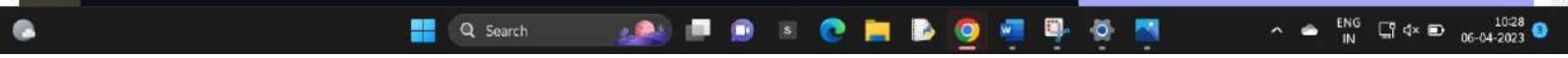
CEQ28
CEQ29
CEQ3
CEQ30
CEQ31
CEQ32
CEQ33
CEQ34
CEQ35
CEQ36

C | Run | Save | Logout

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

6

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



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. 17
2. 26!
3. 143
4. 84.1
5. -963

CEQ3
CEQ30
CEQ31
CEQ32
CEQ33
CEQ34
CEQ35
CEQ36

C | Run | Save | Logout

```c
#include<stdio.h>
int main()
{
int i,number,sum=0;
printf("enter a number:");
scanf("%d",&number);
for(i=1;i<number;i++)
{
if(number%i==0)
sum=sum+i;
}
if(sum==number)
{
printf("\n%d is a perfect number",number);
}
else
{
printf("\n%d is not a perfert number",number);
}
return 0;
}
```

6

enter a number:
6 is a perfect number

Questions

CEQ34.

Write a program to print the below pattern.

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

Test Cases

CEQ28
CEQ29
CEQ3
CEQ30
CEQ31
CEQ32
CEQ33
CEQ34
CEQ35

C | Run | Save | Logout

```c
#include<stdio.h?
int main(){
int rows,i,j,number=1;
printf("enter the number of rows: \n");
scanf("%d",&rows);
for(i=1;i<=rows;i++){
for(j=1;j<=i;++j){
printf("%d",number*number);
++number;
}
printf("\n");
}
return 0;
}
```

Your Input Goes Here...!!!

Loading .....

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

Test Cases

1. N = 0
2. N = -6
3. N = 2021
4. N = -14.5
5. N = -196

CEQ28 CEQ29 CEQ3 CEQ30 CEQ31 CEQ32 CEQ33 CEQ34 CEQ35 CEQ36

C | Run | Save | Logout

```c
#include<stdio.h>
int main(){
int n,m,nthodd;
printf("enter the value of n");
scanf("%d",&n);
printf("enter the position of the odd number tofind");
scanf("%d",&m);
nthodd = ( n+ m - 1) * 2 + 1;

printf("the %dth number after %d odd number is %d\n",m);

return 0;
}

```

0

enter the value of nenter the position of the odd number tofindthe 421th number after 0 odd number is 1398795248

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

```c
#include<stdio.h>
int main(){
int age;
printf("enter the age");
scanf("%d",&age);
if(age>=18){
printf("eligible for vote");
}else
{
printf("notneligible for voting");
printf("has to wait %d years",18-age);
}
return 0;
}
```

7

enter the agenotneligible for votinghas to wait 11 years

C

Run

Save

Logout

```c
#include <stdio.h>
int main()
{
int i,j,n = 4;
for (i = 1 ; i <= n;i++)
{
for (j = 1; j <= i; j++)
{
printf ("%d   ",i);
}
printf(" \n ");
}
return 0;
}
```

4

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

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

CEQ38
CEQ39
CEQ4
CEQ40
CEQ41
CEQ42
CEQ43
CEQ44
CEQ45

C | Run | Save | Logout

```c
#include<stdio.h>
#include<string.h>
int main(){
char str[100];
int i,j, len = 0;
printf("enter the string");
scanf("%s",str);
len = strlen(str);
for(i = 0; i < len ; i++){
if(str[i] =='a' || str[i] == 'e' || str[i]=='i'||str[i]=='o'|| str[i]=='u'||
   str[i]=='A' || str[i] =='E' || str[i] =='I' ||str[i] =='O' || str[i]=='U'){
for (j = i; j<len; j++){
str[j] = str[j + 1];
}
i--;
len--;
}
str[len + 1] = '\0';
}
printf("after deleting the vowles will be %s",str);
return 0;
```

hi

enter the stringafter deleting the vowles will be h

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.

C | Run | Save | Logout

```c
#include<stdio.h>
int main(){
  int rows, i, j, space;
  printf("enter the number of rows:");
  scanf("%d", &rows);
  for (i = rows; i >= 1; --i) {
      for (space = 0; space < rows - i; ++space)
          printf(" ");
      for (j = i; j <= 2 * i - 1; ++j)
          printf("* ");
      for (j = 0; j < i - 1; ++j)
          printf("* ");
       printf("\n");
}
return 0;
}
```

4

```
enter the number of rows:* * * * * * *
* * * * *
 * * *
  *
```

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

```c
#include<stdio.h>
int main()
{
int sum=0;
int num=143;
while(num!=0)
{
sum+=num%10;
num=num/10;
}
printf("\n Sum:%d",sum);
return 0;
}
```

Your Input Goes Here...!!!

Sum:8

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
CEQ4
CEQ40
CEQ41
CEQ42
CEQ43
CEQ44
CEQ45

C | Run | Save | Logout

```c
#include<stdio.h>
void main()
{
int num=153,r,sum=0,temp;
printf("enter a number:");
scanf("%d ",&num);
for(temp=num;num!=0;num=num/10)
{
r=num%10;
sum=sum+(r*r*r);
}
if(sum==temp)
{
printf("armstrong number:");
}
else
{
printf("not armstrong number:");
}
}

```

Your Input Goes Here...!!!

enter a number:armstrong number:

C | Run | Save | Logout

```c
#include<stdio.h>
int main(){
   int rows, cols , i, j;
   printf("enter rows and columns of rectangle\n");
   scanf("%d %d", &rows, &cols);
   for(i = 0; i < rows; i++){
     for(j = 0; j < cols; j++){
        if(i==0 || i==rows-1 || j==0 || j==cols-1)
           printf("$");
        else
           printf(" ");
     }
     printf("\n");
   }
   return 0;
}
```

```
5
4
```

```
enter rows and columns of rectangle
$$$$
$ $
$ $
$ $
$$$$
```

Questions
CEQ44.

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

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

```c
#include<math.h>
#include<stdio.h>
double findsqrt(double N)
{
  return sqrt(N);
}
int main()
{
  int N=6561;
  printf("%f",findsqrt(N));
  return 0;
}
```

Your Input Goes Here...!!!

81.000000

C | Run | Save | Logout

```c
#include <stdio.h>
#include <string.h>
int main()
{
char str[100];
char ch;
printf("Enter a string:");
fgets(str,sizeof(str),stdin);
printf("Enter a character to search for:");
scanf("%c",&ch);
int found=0;
for(int i=0;i<strlen(str);i++)
{
if(str[i]==ch)
{
found=1;
break;
}
}
if(found)
{
printf("The character %c is present in the string\n",ch);
}
else
{
printf("The character %c is not present in the string.\n",ch);
}
return 0;
}
```

I am a programmer
p

Enter a string:Enter a character to search for:The character p is present in the string