18/08/2025

1.Print numbers 1 to 10 using all loops

```
#include<stdio.h>
#include<conio.h>
void main(){
int i;
clrscr();
printf("Using for loop:\n");
for(i=0;i<=10;i++)
printf("%d\t",i);
printf("\n");
printf("Using while loop:\n");
i=1;
while(i<=10){
printf("%d\t",i);
i++;
}
printf("\n");
printf("Using do-while loop\n");
i=1;
do{
printf("%d\t",i);
i++;
}while(i<=10);
getch();
}
```

```
Op:  Using for loop:
0       1       2       3       4       5       6       7       8       9       10
Using while loop:
1       2       3       4       5       6       7       8       9       10
Using do-while loop
1       2       3       4       5       6       7       8       9       10
```

2.Sum of digits of number

```
#include<stdio.h>
#include<conio.h>
void main(){
int n,sum=0,remainder;
clrscr();
printf("Enter a number:\n");
```

```
scanf("%d",&n);
while(n>0){
remainder=n%10;
sum=sum+remainder;
n=n/10;
}
printf("Sum of digits of a number is %d",sum);
getch();
}
```

op:

```
Enter a number:
5678
Sum of digits of a number is 26
```

3.Factorial of a number

```
#include<stdio.h>
#include<conio.h>
void main(){
int fact=1,n,i;
clrscr();
printf("Enter a number to find factorial ");
scanf("%d",&n);

for(i=1;i<=n;i++){
fact=fact*i;
}
printf("Factorial is %d",fact);
getch();
}
```

```
Op: Enter a number to find factorial 6
Factorial is 720
```

4.Fibonacci series

```
#include<stdio.h>
#include<conio.h>
void main(){
int n,a=0,b=1,c,i;
clrscr();
printf("Enter number of terms for fibonacci series ");
scanf("%d",&n);
```

```
printf("Fibonacci series ");
for(i=1;i<=n;i++){
printf("%d\t",a);
c=a+b;
a=b;
b=c;
}
getch();
}
```

Op: Enter number of terms for fibonacci series 7
Fibonacci series 0 1 1 2 3 5 8

5.Reverse digits of a number

```
#include<stdio.h>
#include<conio.h>
void main(){
int n,rev=0,rem;
clrscr();
printf("Enter a number ");
scanf("%d",&n);
while(n>0){
rem=n%10;
rev=rev*10+rem;
n=n/10;
}
printf("Reversed number is %d",rev);
getch();
}
```

Op: Enter a number 4567
Reversed number is 7654

6.check for pallindrome and armstrong number

```
#include<stdio.h>
#include<conio.h>
int main(){
int n,temp,rem,rev=0,sum=0,digits=0;
clrscr();
printf("Enter a number");
scanf("%d",&n);

temp=n;
rev=0;
```

```
while(temp>0){
rem=temp%10;
rev=rev*10+rem;
temp=temp/10;
}
if(n==rev)
        printf("%d is pallindrome\n",n);
else
        printf("%d is not a pallindrome\n",n);

temp=n;
digits=0;
while(temp>0){
digits++;
temp=temp/10;
}

temp=n;
sum=0;
while(temp>0){
rem=temp%10;
sum=sum+(int)pow(rem,digits);
temp=temp/10;
}
if(sum==n)
        printf("%d is an armstrong\n",n);
else
        printf("%d is not armstrong\n",n);
getch();
}
```

Op: Enter a number121
121 is pallindrome
121 is not armstrong

Enter a number153
153 is not a pallindrome
153 is an armstrong

Enter a number123
123 is not a pallindrome
123 is not armstrong