

Assignment-11

① write a program to calculate Sum of first N natural numbers

```
Ans #include <stdio.h>
int main()
{
    int i, n;
    int sum = 0;
    printf("Enter a number");
    scanf("%d", &n);
    for (i = 1; i <= n; i++)
    {
        sum = sum + i;
    }
    printf("Sum of first natural Number is %d", sum);
    return 0;
}
```

Enter a number 5
Output: Sum of first natural Number is 15

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Q2) write a program to calculate sum of first N even no.

Ans #include <stdio.h>

```
int main()
{
```

```
    int i, n;
```

```
    int sum = 0;
```

```
    printf("Enter a number");
```

```
    scanf("%d", &n);
```

```
    for(i=1; i<=n; i++)
```

```
    {
```

```
        sum = sum + i*2;
```

```
    }
```

```
    printf("Sum of first N natural Even no. is
```

```
    %d", sum);
```

output: Enter a number 5
Sum of first N natural Even no. is 30

Q3) write a program to calculate sum of first N odd no.

Ans #include <stdio.h>

```
int main()
{
```

```
    int i, n, sum;
```

```
    printf("Enter a number");
```

```
    scanf("%d", &n);
```

```
    for(i=1; i<=n; i++)
```

```
    {
```

```
        sum = sum + 2*i-1;
```

```
    }
```

```
    printf("Sum of first N natural odd no. is %d", sum);
```

output: Enter a number 4

sum of first 4 natural odd number is 16

Q4) write a program to calculate sum of square of first N natural Number.

Ans #include <stdio.h>

int main()

{

int i, n, Sum = 0;

printf("Enter a number");

scanf("%d", &n);

for(i=1; i<=n; i++)

{

Sum = Sum + i*i;

}

return 0; printf("Sum of square number is %d", Sum);

}

Output: Enter a Number 5
Sum of first 5 number is 55

Q5) write a program to calculate sum of cubes of first N natural numbers.

Ans #include <stdio.h>

int main()

{

int i, n, Sum = 0;

printf("Enter a number");

scanf("%d", &n);

for(i=1; i<=n; i++)

{

Sum = Sum + i*i*i;

}

printf("Sum of first N natural cube Number is %d", Sum);

return 0;

}

Output:
Enter a number 4

Sum of first N natural cube Number is 100

Q6) write a program to calculate factorial of a No.

Ans #include <stdio.h>

```
int main()
{
```

```
    int i, n, fact=1;
```

```
    printf("Enter a number");
```

```
    scanf("%d", &n);
```

```
    for (i=1; i<=n; i++)
```

```
    {
```

```
        fact=fact*i;
```

```
    printf("factorial is %d", fact);
```

```
    return 0;
```

output:

Enter a number 5

factorial is 120

Q7) write a program to count digits in a given no.

Ans #include <stdio.h>

```
int main()
{
```

```
    int n, i, count=0;
```

```
    printf("Enter a number");
```

```
    scanf("%d", &n);
```

```
    count++;
```

```
    printf("count digit is %d", count);
```

```
    return 0;
```

```
    while (n!=0)
```

```
    {
```

```
        n=n/10;
```

```
        count++;
```

```
        n=n/10;
```

```
    printf("count digit is %d", count);
```

```
    return 0;
```

output:

Enter a number 1834

count digit is 4

(8) write a program to check whether a given number is a prime number or not.

Ans #include <stdio.h>

int main()

{

int a, i, count = 0;

printf("Enter a number");

scanf("%d", &a);

for(i = 2; i <= a; i++)

{

if(a % i == 0)

count++;

if(count == 0)

{

printf("prime Number");

}

else

{

printf("Not a prime");

}

return 0;

}

Output: Enter a number 5

prime number.



Q.9) write a program to reverse a given number.

Ans #include <stdio.h>

int main()

{

int a, b, i;

printf("Enter two number");

scanf("%d %d", &a, &b);

for(i=1; i<=a*b; i++)

{

if(i%a==0 && i%b==0)

break;

}

printf("LCM is %d", i);

return 0;

}

Q.10) write a program to reverse a give number.

Ans #include <stdio.h>

int main()

{

int a, r, rev=0;

printf("Enter a number");

scanf("%d", &a);

while(a!=0)

{

r=a%10;

rev=rev*10+r;

a=a/10;

}

printf("%d reverse Number", rev);

return 0;

}