FOC – DAY1

1.Number series

#include<stdio.h>

int main()

{

int n,a[20],i;

printf("enter n elements:");

scanf("%d",&n);

printf("elements are:");

for(i=0;i<n;i++)

scanf("%d",&a[i]);

printf("the number value is:");

for(i=0;i<n;i++)

printf("%d", a[i]);

}

OUTPUT: enter n elements:5

elements are:1

2

3

4

5

the number value is:12345

2.Even number series

#include<stdio.h>

int main()

{

int n,a[20],i;

printf("enter n elements:");

scanf("%d",&n);

printf("elements are:");

for(i=0;i<n;i++)

scanf("%d",&a[i]);

printf("the number value is:");

for(i=0;i<n;i++)

{

if(a[i]%2 == 0)

printf("%d", a[i]);

}

}

OUTPUT: enter n elements:5

elements are:1

2

3

4

5

the number value is:2 4

3.Odd number series

#include<stdio.h>

int main()

{

int n,a[20],i;

printf("enter n elements:");

scanf("%d",&n);

printf("elements are:");

for(i=0;i<n;i++)

scanf("%d",&a[i]);

printf("the number value is:");

for(i=0;i<n;i++)

{

if(a[i]%2 != 0)

printf("%d ", a[i]);

}

}

4.Fibonnaci series

#include<stdio.h>

int main()

{

int n,n1=0,n2=1,nt,i;

printf("enter n elements:");

scanf("%d",&n);

printf("the fibonnaci series is:");

printf("%d %d ",n1,n2);

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

{

nt = n1 + n2;

n1 = n2;

n2 = nt;

printf("%d ",nt);

}

}

OUTPUT:enter n elements:5

The fibonnaci series is:0 1 1 2 3

5.Sum up number series

#include<stdio.h>

int main()

{

int n,a[20],i,sum=0;

printf("enter n elements:");

scanf("%d",&n);

printf("elements are:");

for(i=0;i<n;i++)

scanf("%d",&a[i]);

for(i=0;i<n;i++)

{

sum = sum + a[i];

}

printf("sum of the number series:%d",sum);

}

OUTPUT: enter n elements:5

elements are:1

2

3

4

5

sum of the number series:15

6.Sum up even number series

#include<stdio.h>

int main()

{

int n,a[20],i,sum=0;

printf("enter n elements:");

scanf("%d",&n);

printf("elements are:");

for(i=0;i<n;i++)

scanf("%d",&a[i]);

for(i=0;i<n;i++)

{

if(a[i]%2 == 0)

sum = sum + a[i];

}

printf("sum of the number series:%d",sum);

}

OUTPUT: enter n elements:7

elements are:1

2

3

4

5

6

7

sum of the number series:12

7.Sum up the cube of number series

#include<stdio.h>

int main()

{

int n,a[20],i,sum=0;

printf("enter n elements:");

scanf("%d",&n);

printf("elements are:");

for(i=0;i<n;i++)

scanf("%d",&a[i]);

for(i=0;i<=n;i++)

{

a[i] = i \* i \* i;

sum = sum + a[i];

}

printf("sum of the number series:%d",sum);

}

OUTPUT: enter n elements:6

elements are:1

2

3

4

5

6

sum of the number series:441

8.Number is even or odd

#include<stdio.h>

int main()

{

int n;

printf("enter a number:");

scanf("%d",&n);

if(n%2==0)

printf("%d is even number",n);

else

printf("%d is odd number",n);

}

OUTPUT: enter a number:7

7 is odd number

9.Factorial of a number

#include<stdio.h>

int main()

{

int n,i,fact=1;

printf("enter a number:");

scanf("%d",&n);

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

{

fact = fact \* i;

}

printf("the factorial of %d: %d",n,fact);

}

OUTPUT: enter a number:6

the factorial of 6: 720

10.Armstrong number

#include<stdio.h>

int main()

{

int n,i,rem,rev=0,temp;

printf("enter a number:");

scanf("%d",&n);

temp = n;

while(n!=0)

{

rem = n % 10;

rev = rev + (rem \* rem \* rem);

n = n / 10;

}

if(temp == rev)

printf("%d is armstrong number",temp);

else

printf("%d is not an armstrong number",temp);

}

OUTPUT: enter a number:124

124 is not an armstrong number

11.Finding sum & average of number series

#include<stdio.h>

int main()

{

int n,i,a[20],sum = 0;;

float avg;

printf("enter n elements:");

scanf("%d",&n);

printf("elements are:");

for(i=0;i<n;i++)

scanf("%d",&a[i]);

for(i=0;i<n;i++)

{

sum = sum + a[i];

}

avg = (sum / n);

printf("sum of the %d numbers:%d\n",n,sum);

printf("average of %d numbers:%f\n",n,avg);

}

OUTPUT:

enter n elements:2

elements are:1

2

sum of the 2 numbers:3

average of 2 numbers:1.000000

12.Printing digits of an integer

#include<stdio.h>

int main()

{

int i,n,a[20],rem,temp;

printf("enter an integer:");

scanf("%d",&n);

temp = n;

while(n!=0)

{

rem = n % 10;

a[i] = rem;

i++;

n = n/10;

}

printf("the digits of %d:",temp);

for(i=i-1;i>-1;i--)

printf("%d ",a[i]);

}

OUTPUT: enter an integer:123

the digits of 123:1 2 3

13.Sum up the digits an integer

#include<stdio.h>

int main()

{

int i,n,a[20],rem,temp,sum = 0;

printf("enter an integer:");

scanf("%d",&n);

temp = n;

while(n!=0)

{

rem = n % 10;

a[i] = rem;

i++;

sum = sum + rem;

n = n/10;

}

printf("the digits of %d:",temp);

for(i=i-1;i>-1;i--)

printf("%d ",a[i]);

printf("\n");

printf("the sum of the digits :%d\n",sum);

}

OUTPUT:

enter an integer:234

the digits of 234:2 3 4

the sum of the digits :9

14.Username is valid or not

#include<stdio.h>

#include<string.h>

int match(char user1[100], char user2[100]) {

int n, m, i, j, c = 0, t = 0;

n = strlen(user1);

m = strlen(user2);

for (i = 0; i <= n - m; i++) {

t++;

for (j = 0; j < m; j++) {

if (user1[i + j] == user2[j])

c++;

}

if (c == m)

return t;

c = 0;

}

return -1;

}

int main()

{

int status;

char user1[20],user2[20];

int flag = 0;

printf("enter the username:");

gets(user1);

printf("reenter username:");

gets(user2);

status = match(user1,user2);

if(status == -1)

printf("username is invalid");

else

printf("username is valid");

}

OUTPUT:

enter the username:saveetha@123

reenter username:saveetha@789

username is invalid

15.Positive integer or not

#include<stdio.h>

int main()

{

int n;

printf("enter integer:");

scanf("%d",&n);

if(n>=0)

printf("%d is positive integer",n);

else

printf("%d is negative integer",n);

}

OUTPUT: enter integer:7

7 is positive integer

16.Swapping using temp variable

#include<stdio.h>

int main()

{

int a,b,temp;

printf("enter a & b values:");

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

printf("before swapping:\n");

printf("a = %d , b = %d\n",a,b);

printf("after swapping:\n");

temp = a;

a = b;

b = temp;

printf("a = %d , b = %d",a,b);

}

OUTPUT: enter a & b values:45

54

before swapping:

a = 45 , b = 54

after swapping:

a = 54 , b = 45