

ASSIGNMENT 6 ANSWER

NAME –ABHISEK DAS

REGD NO- 2061020020

1. Calculate the sum of numbers (10 numbers max) & If the user enters a negative number, the loop terminates.

Program:-

```
#include <stdio.h>
int main() {
    int no,a[10],i,sum=0;
    printf("Enter no of terms: ");
    scanf("%d",&no);
    printf("Enter 10 nos: ");
    for(i=0;i<no;i++)
    {
        scanf("%d",&a[i]);
        if(a[i]<0)
        {
            break;
        }
        sum=sum+a[i];
    }
    printf("Sum of the entered no is =%d",sum);
    return 0;
}
```

Output:-

Enter no of terms: 4

Enter 10 nos: 5

6

-1

Sum of the entered no is =11

2. calculate the sum of numbers (10 numbers max) & If the user enters a negative number, it's not added to the result.

Program:-

```
#include <stdio.h>
int main() {
    int no,a[10],i,sum=0;
    printf("Enter no of terms: ");
    scanf("%d",&no);
    printf("Enter 10 nos: ");
    for(i=0;i<no;i++)
    {
        scanf("%d",&a[i]);
        if(a[i]<0)
            continue;
        sum=sum+a[i];
    }

    printf("Sum of the entered no is = %d",sum);
    return 0;
```

Output:-

```
Enter no of terms: 5
Enter 10 nos: 1
5
-1
4
5
Sum of the entered no is =15
```

3.take input from the user until he/she enters zero. (Using Break)

Program:-

```
#include <stdio.h>
int main() {
    int no,a[10],i,sum=0;
    printf("Enter no of terms: ");
    scanf("%d",&no);
    printf("Enter 10 nos: ");
    for(i=0;i<no;i++)
    {
        scanf("%d",&a[i]);
        if(a[i]==0)
            break;
    }
    printf("the entered no is = %d",a[i]);
    return 0;
}
```

Output:-

```
Enter no of terms: 5
Enter 10 nos: 1
2
4
0
the entered no is = 0
```

4.check whether the given number is prime or not.(Using Break)

Program:-

```
#include <stdio.h>
#include<math.h>
int main() {
    int no,i,c;
    printf("Enter the given no: ");
    scanf("%d",&no);
    for (i=2;i<=sqrt(no);i++)
    {
        if (no>0&&no%i==0)
        c=0;
        break;
    }
    if (no==1)
    {
        printf("the entered no %d is a natural no.\n",no);
    }
    if (c!=0)
    {
        printf(" %d is a prime no.",no);
    }
    else
    {
        printf("thd %d is not a prime no.",no);
    }

    return 0;
}
```

Output:-

Enter the given no: 4
thd 4 is not a prime no.

5. print sum of odd numbers between 0 and 10. (Using Continue)**Program:-**

```
#include <stdio.h>
int main() {
    int i,sum=0;
    printf("The odd no between 1 to 10 are: \n");
    for (i=1;i<=10;i++)
    {
        if (i%2==0)
            continue;
        printf("%d\t",i);
        sum=sum+i;
    }
    printf("\nSum of the odd no between 1 to 10 is: %d",sum);
    return 0;
}
```

Output:-

The odd no between 1 to 10 are:

1 3 5 7 9

Sum of the odd no between 1 to 10 is: 25

6. check whether the given number is prime or not.(Using Continue)

Program:-

```
#include <stdio.h>
int main()
{
    int i,n, count;
    printf("enter a number:");
    scanf("%d",&n);
    for(i=2 ; i<= n/2 ; i++) {
        if(n>0&&n%i == 0) {
            count = 0;
            continue;
        }
    }
    if (n==1)
        printf("%d is a natural no.",n);
    else if(count !=0)
        printf("%d is a prime number", n);
```

```
else
printf("%d is not a prime number", n);
return 0;
}
```

Output:-

Enter no: 8
No 8 is not a prime no.

7. print all even numbers from 1 to 100. (Using Continue)

Program:-

```
#include<stdio.h>
int main()
{
    int i;
    printf("all the even no from 1 to 100: ");
    for(i=1;i<=100;i++)
    {
        if(i%2!=0)
            continue;
        printf("%d\t", i);
    }

    return 0;
}
```

Output:-

all the even no from 1 to 100:

						2	4	6	8	10	12
14	16	18	20	22	24	26	28	30	32	34	36
38	40	42	44	46	48	50	52	54	56	58	60
62	64	66	68	70	72	74	76	78	80	82	84
86	88	90	92	94	96	98	100				

8. print numbers from 1 to 10 using goto statement. (Using goto)**Program:-**

```
#include<stdio.h>
int main()
{
    int i=1;
    printf("nos from 1 to 10\n");
table:
    printf("%d\t",i);
    i++;
    if(i<=10)
        goto table;
    return 0;
}
```


Output:-

nos from 1 to 10

1 2 3 4 5 6 7 8 9 10

9. Program to calculate the sum and average of positive numbers, If the user enters a negative number, the sum and average are displayed. (Using goto)

Program:-

```
#include <stdio.h>
int main() {
    int a[100],n,i,sum=0;
    float avg,c;
    printf("enter no of entries : ");
    scanf("%d",&n);
    printf("enter nos: \n");
    table :
    for(i=1;i<=n;i++)
    {
        scanf("%d",&a[i]);
        if (a[i]<0)
```

```

break;
sum=sum+a[i];
avg=sum/i;
}
printf("Sum is %d\n",sum);
printf("Avg is %f",avg);
goto table;
return 0;
}

```

Output:-

```

enter no of entries : 4
enter nos:
10
20
-1
Sum is 30
Avg is 15.000000

```

10. Check if a number is even or not. (Using goto)

Program:-

```

// Online C compiler to run C program online
#include <stdio.h>
int main() {
    int no,i;
    printf("Enter a no: ");
    scanf("%d",&no);
    table :
    if (no%2==0)

```

```
printf("Your Entered No %d is Even.",no);  
else  
printf("Your Entered No %d is Odd.",no);  
if(i<=1)  
goto table;  
return 0;  
}
```

Output:-

Enter a no: 3

Your Entered No 3 is Odd.