**ASSIGNMENT-6**

**PALLABI SETHI**

**REGD NO-2061020049**

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.