***ASSIGNMENT-6***

Q1. Calculate the sum of numbers (10 numbers max) & If the user enters a negative number, the loop terminates

#include <stdio.h>

int main()

{

int number, i, sum=0;

for(i=1;i<=10;i++)

{

printf("Enter number: ");

scanf("%d",&number);

if( number<0 )

break;

sum += number;

}

printf("Sum=%d",sum);

return 0;

}

OUTPUT

Enter number: 20

Enter number: 30

Enter number: 40

Enter number: 50

Enter number: 60

Enter number: 70

Enter number: 80

Enter number: 90

Enter number: 100

Enter number: 110

Sum=650

Q2. Calculate the sum of numbers (10 numbers max) & If the user enters a negative number, it's not added to the result.

#include <stdio.h>

int main()

{

int number, i, sum=0;

for(i=1;i<=10;i++)

{

printf("Enter number: ");

scanf("%d",&number);

if( number<0 ) //-ve numbers are skipped

continue;

sum += number; //sum = sum + number

}

printf("Sum=%d",sum);

return 0;

}

OUTPUT:

Enter number: 40

Enter number: -40

Enter number: 40

Enter number: 40

Enter number: 40

Enter number: 40

Enter number:40

Enter number: 40

Enter number: 40

Enter number: 40

Sum=320

Q3. Take input from the user until he/she enters zero. (Using Break)

#include <stdio.h>

int main()

{

int a;

while (1)

{

printf("enter the number:");

scanf("%d", &a);

if ( a == 0 )

break;

}

return 0;

}

OUTPUT

enter the number:65

enter the number:75

enter the number:0

Q4. Check whether the given number is prime or not.(Using Break)

#include <stdio.h>

int main()

{

int i,n, count = 0;

printf("enter a number:");

scanf("%d",&n);

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

if(n%i == 0) {

count = count+1;

break;

}

}

if(count == 2) {

printf("%d is a prime number", n);

}else{

printf("%d is not a prime number", n);

}

return 0;

}

OUTPUT

enter a number:7

7 is not a prime number

Q5. Print sum of odd numbers between 0 and 10. (Using Continue)

#include <stdio.h>

int main()

{

int number, i, sum=0;

for(i=1;i<=10;i++)

{

printf("Enter number: ");

scanf("%d",&number);

if( number%2==0 )

continue;

sum += number;

}

printf("Sum=%d",sum);

return 0;

}

OUTPUT

Enter number: 1

Enter number: 2

Enter number: 3

Enter number: 4

Enter number: 5

Enter number: 6

Enter number: 7

Enter number: 8

Enter number: 9

Enter number: 10

Sum=25

Q6. Check whether the given number is prime or not.(Using Continue)

#include <stdio.h>

int main()

{

int i,n, count = 0;

printf("enter a number:");

scanf("%d",&n);

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

if(n%i == 0) {

count = count+1;

continue;

}

}

if(count == 2) {

printf("%d is a prime number", n);

}else{

printf("%d is not a prime number", n);

}

return 0;

}

OUTPUT

enter a number:37

37 is not a prime number

Q7. Print all even numbers from 1 to 100. (Using Continue)

#include <stdio.h>

int main()

{

int n;

printf("Even numbers between 1 to 100\n");

for(n= 1; n <= 100; n++) {

if(n%2 == 0) {

continue;

}

printf("%d ",n);

}

return 0;

}

OUTPUT

Even numbers between 1 to 100

1 3 5 7 9 11 13 15 17 19 21 23 25 27 29 31 33 35 37 39 41 43 45 47 49 51 53 55 57 59 61 63 65 67 69 71 73 75 77 79 81 83 85 87 89 91 93 95 97

99

Q8. Print numbers from 1 to 10 using goto statement. (Using goto)

#include <stdio.h>

int main()

{

int count,n;

printf("Enter value of n: ");

scanf("%d",&n);

count =1;

start:

printf("%d ",count);

count++;

if(count<=n)

goto start;

return 0;

}

OUTPUT

Enter value of n: 10

1 2 3 4 5 6 7 8 9 10

Q9. 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)

#include <stdio.h>

int main()

{

int n, sum=0,avg;

start:

printf("Enter a number: ");

scanf("%d",&n);

if(n<0)

goto end;

sum = sum + n;

avg=sum/3;

goto start;

end:

printf("Sum = %d\n",sum);

printf("avg= %d",avg);

return 0;

}

OUTPUT

Enter a number: 10

Enter a number: 20

Enter a number: 30

Enter a number: -90

Sum = 60

avg= 20

Q10. Check if a number is even or not. (Using goto)

#include <stdio.h>

int main()

{

int n;

printf("enter a number:");

scanf("%d",&n);

if(n%2!=0)

goto end;

if(n%2==0)

printf("no is even");

end:

return 0;

}

OUTPUT1:

enter a number:8

no is even