programming and structures using c

Assignment 6

1.  calculate  the  sum  of  numbers  (10  numbers  max) & If the  user enters  a  negative number, the  loop terminates.  
#include <stdio.h>  
int main() {  
    int i,sum=0,n;  
    for(i=1;i<=10;i++)  
    {  
        printf("enter number %d:",i);  
        scanf("%d",&n);  
        if(n>=0)  
           sum+=n;  
        else  
            break;  
    }  
printf("the sum of the  numbers is:%d",sum);  
    return 0;  
}  
  
Output-  
enter number 1:1  
enter number 2:3  
enter number 3:5  
enter number 4:-1  
the sum of 10 numbers is:9

2.  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 i,sum=0,n;  
    for(i=1;i<=10;i++)  
    {  
        printf("enter number %d:",i);  
        scanf("%d",&n);  
        if(n>=0)  
           sum+=n;  
    }  
printf("the sum of the numbers is:%d",sum);  
    return 0;  
}  
  
Output-  
enter number 1:1  
enter number 2:1  
enter number 3:1  
enter number 4:1  
enter number 5:1  
enter number 6:1  
enter number 7:1  
enter number 8:1  
enter number 9:1  
enter number 10:-1  
the sum of the numbers is:9

3.  take  input  from  the user  until  he/she  enters  zero.  (Using  Break)  
include <stdio.h>  
int main() {  
    int n;  
  do  
  {  
   printf("input data:");  
   scanf("%d",&n);  
  }while(n!=0);  
printf("ERROR!!!\n no further input possible");  
    return 0;  
}  
Output-  
Input data:1  
input data:2  
input data:0  
ERROR!!!  
no further input possible

4.  check whether the given  number  is  prime or  not.(Using  Break)  
#include <stdio.h>  
int main() {  
    int p=1,n,i=2;  
    printf("enter a number to determine prime or not:\n");  
    scanf("%d",&n);  
    do{  
       if(n%i==0||n==1)  
       {  
       p=0;  
       break;  
       }  
       i++;  
    }while(i<n/2);  
      
   if(p==0&&n!=2)  
   printf("%d is not a prime number",n);  
   else  
   printf("%d is a prime number",n);  
     
    return 0;  
}  
Output-  
enter a number to determine prime or not:  
6  
is not a prime number

5. print  sum of odd numbers between 0 and 10. (Using Continue)  
#include <stdio.h>  
int main() {  
    int i,sum=0;  
    for(i=0;i<=10;i++)  
    {  
        if(i%2!=0)  
        sum+=i;  
        continue;  
    }  
    printf("sum of odd numbers 0 to 10 is:%d",sum);  
     
    return 0;  
}  
Output-  
Sum of odd numbers 0 to 10 is:25

7. print  all  even  numbers  from  1 to  100. (Using  Continue)  
#include<stdio.h>  
int main() {  
    int i;  
    for(i=1;i<=100;i++)  
    {  
        if(i%2==0)  
        printf("%d\t",i);  
        continue;  
    }  
     
    return 0;  
}  
Output-  
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)    
#include <stdio.h>  
  
int main() {  
    int i=1;  
    print:  
    printf("%d\n",i);  
    i++;  
    if(i<=10)  
    goto print;  
  
   return 0;  
    
}  
Output-  
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)  
#include <stdio.h>  
int main() {  
    int i=1,j,n,sum=0,count=0;  
    printf("enter the number of input you want \n");  
    scanf("%d",&j);  
    printf("enter the numbers:\n");  
    while(i<=j){  
     scanf("%d",&n);  
       if(n<0)  
       {  
    goto display;  
       }  
       sum+=n;  
     i++;  
     count++;  
    }  
     
    display:  
    printf("the sum is: %d\n",sum);  
    printf("the avg is: %d",sum/count);  
  
   return 0;  
    
}  
Output-  
enter the number of input you want  
7  
enter the numbers:  
1  
2  
3  
-1  
the sum is: 6  
the avg is: 2

10.check  if  a  number  is  even or  not.  (Using  goto)  
#include <stdio.h>  
  
int main() {  
    int n;  
    printf("enter a number to check is even or not\n");  
    scanf("%d",&n);  
    if(n%2==0)  
       goto even;  
       else  
       goto odd;  
        
  
       even:  
       printf("%d is even",n);  
       return 0;  
       odd:  
       printf("%d is odd",n);  
    return 0;  
}  
Output-  
enter a number to check  even or not  
7  
7 is odd