<u>Assignment 6 – Pabitra Pattanaik</u>

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

```
Answer:
#include<stdio.h>
void main()
{
    int num, i, sum=0;
    for(i=0;i<=10;i++)
    {
    printf("Enter the number = ");
    scanf("%d",&num);
    if( num<0 )
    break;
    sum= sum+num;
    }
    printf("Sum of all number =%d",sum);</pre>
```

```
C:\Users\PABITRA\Music\SOA\PDSC\Program\sum Of ten.exe

Enter the number = 1

Enter the number = 2

Enter the number = -2

Sum of all number = 3
```

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>
void main()
{
    int num, i, sum=0;
```

```
for(i=0;i<=10;i++)
    {
    printf("Enter number: ");
    scanf("%d",&num);
    if( num<0 )
     continue;
    sum= sum+num;
     }
    printf("Sum=%d",sum);
}</pre>
```

```
Enter number: 1
Enter number: 2
Enter number: 3
Enter number: -2
Enter number: 4
Enter number: 5
Enter number: 6
Enter number: 7
Enter number: 8
Enter number: 9
Enter number: 10
Sum=55
```

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

```
#include<stdio.h>
void main()
{
    int num;
    while(1)
    {
        printf("Enter the Number = ");
        scanf("%d",&num);
        if(num == 0)
```

```
Enter the Number = 1
Number = 1
Enter the Number = 2
Number = 2
Enter the Number = 3
Number = 3
Enter the Number = 4
Number = 4
Enter the Number = 0
You entered 0 so the loop terminated
```

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

```
#include <stdio.h>
void main()
{
   int num, i, value;
   printf("Enter the number = ");
   scanf("%d", &num);
   value = 0;
   for (i = 2;i<=(num/2);i++)
      {
      if (num % i == 0)
            {
            value = 1;
            break;
      }
}</pre>
```

```
if (num == 1)
    {
    printf("The number 1 is not a Prime number");
}
else
    {
    if (value == 0)
        printf("%d is a Prime number", num);
    else
        printf("%d is not a Prime number", num);
}
}

C:\Users\PABITRA\Music\SOA\PDSC\Program\Prime_Break.exe

Enter the number = 5
is a Prime number
```

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

```
#include<stdio.h>
void main()
{
    int num=10,i,sum=0;
    for(i=0;i<=num;++i)
    {
    if( i%2 == 0 )
    continue;
    printf("i=%d\n",i);
    sum= sum+i;
    }
    printf("\nSum of all even number =%d",sum);
}</pre>
```

```
C:\Users\PABITRA\Music\SOA\PDSC\Program\Odd_Betn_ZeroToTen.exe

i=1
i=3
i=5
i=7
i=9

Sum of all even number =25
```

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

```
#include <stdio.h>
void main()
  int num, i, value;
  printf("Enter the number = ");
  scanf("%d", &num);
  value = 0;
  for (i = 2;i<=(num/2);i++)
    if (num \% i == 0)
      value = 1;
      continue;
    }
  }
  if (num == 1)
      {
    printf("The number 1 is not a Prime number");
  }
  else
      {
    if (value == 0)
       printf("%d is a Prime number", num);
    else
       printf("%d is not a Prime number", num);
```

```
C:\Users\PABITRA\Music\SOA\PDSC\Program\Prime_Continue.exe

Enter the number = 5
5 is a Prime number
```

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

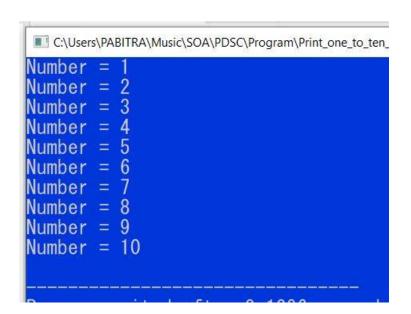
```
Answer:
#include<stdio.h>
void main()
{
        int num=100,i,sum=0;
        printf("Even Number in between 1 to 100 = \n");
        for(i=1;i<=num;++i)
        {
        if( i%2 != 0 )
        continue;
        printf("Number = %d\t",i);
}
</pre>
```

```
C:\Users\PABITRA\Music\SOA\PDSC\Program\Print_one_to_hundred.exe
Even Number in between 1 to 100 =
                                            Number = 8
                                                           Number = 10
                                                                           Number = 12
                                                                                          Number = 14
                                                                                                          Number = 16
Number = 2
              Number = 4
                             Number = 6
                                            Number = 24
                              Number = 22
                                                           Number = 26
                                                                            Number = 28
 Number = 18
                Number = 20
                                                                                            Number = 30
       Number = 32
                      Number = 34
                                     Number = 36
                                                    Number = 38
                                                                    Number = 40
                                                                                   Number = 42
                                                                                                  Number = 44
                                                    Number = 52
       Number = 46
                      Number = 48
                                     Number = 50
                                                                    Number = 54
                                                                                   Number = 56
                                                                                                  Number = 58
       Number = 60
                   Number = 62
                                    Number = 64
                                                    Number = 66
                                                                    Number = 68
                                                                                   Number = 70
                                                                                                  Number = 72
                   Number = 76
                                    Number = 78
                                                    Number = 80
                                                                    Number = 82
                                                                                   Number = 84
                                                                                                  Number = 86
       Number = 74
       Number = 88
                      Number = 90
                                    Number = 92
                                                    Number = 94
                                                                    Number = 96
                                                                                   Number = 98
                                                                                                  Number = 100
```

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

Answer:

```
#include <stdio.h>
void main ()
{
    int num = 0;
    do
    {
        num++;
        goto jump;
        jump:
        printf("Number = %d\n", num);
    }
    while( num < 10 );
}</pre>
```



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,n;
float num, average, sum = 0;
      printf("Enter the maximum limits = ");
      scanf("%d",&n);
 for (i = 1; i <= n; i++)
   printf("%d Enter a number = ", i);
   scanf("%f",&num);
   if (num < 0.0)
    goto jump;
   sum = sum+num;
 }
jump:
 average = sum / (i - 1);
 printf("Sum = %f\n", sum);
 printf("Average = %f", average);
return 0;
}
 Enter the maximum limits = 100
```

```
Enter the maximum limits = 100

1 Enter a number = 5

2 Enter a number = 6

3 Enter a number = 4

4 Enter a number = -2

Sum = 15.000000

Average = 5.000000
```

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

```
#include<stdio.h>
int main()
{
    int num;
```

```
printf("Enter the Number = ");
      scanf("%d",&num);
      if(num%2==0)
      {
            goto even;
      }
      else
      {
            goto odd;
      }
      even:
      printf("The Number Is Even");
      odd:
      printf("The Number is Odd Number");
      return 0;
}
 C:\Users\PABITRA\Music\SOA\PDSC\Program\Even_or_Odd_Using_g
 Enter the Number = 5
ssThe Number is Odd Number
```