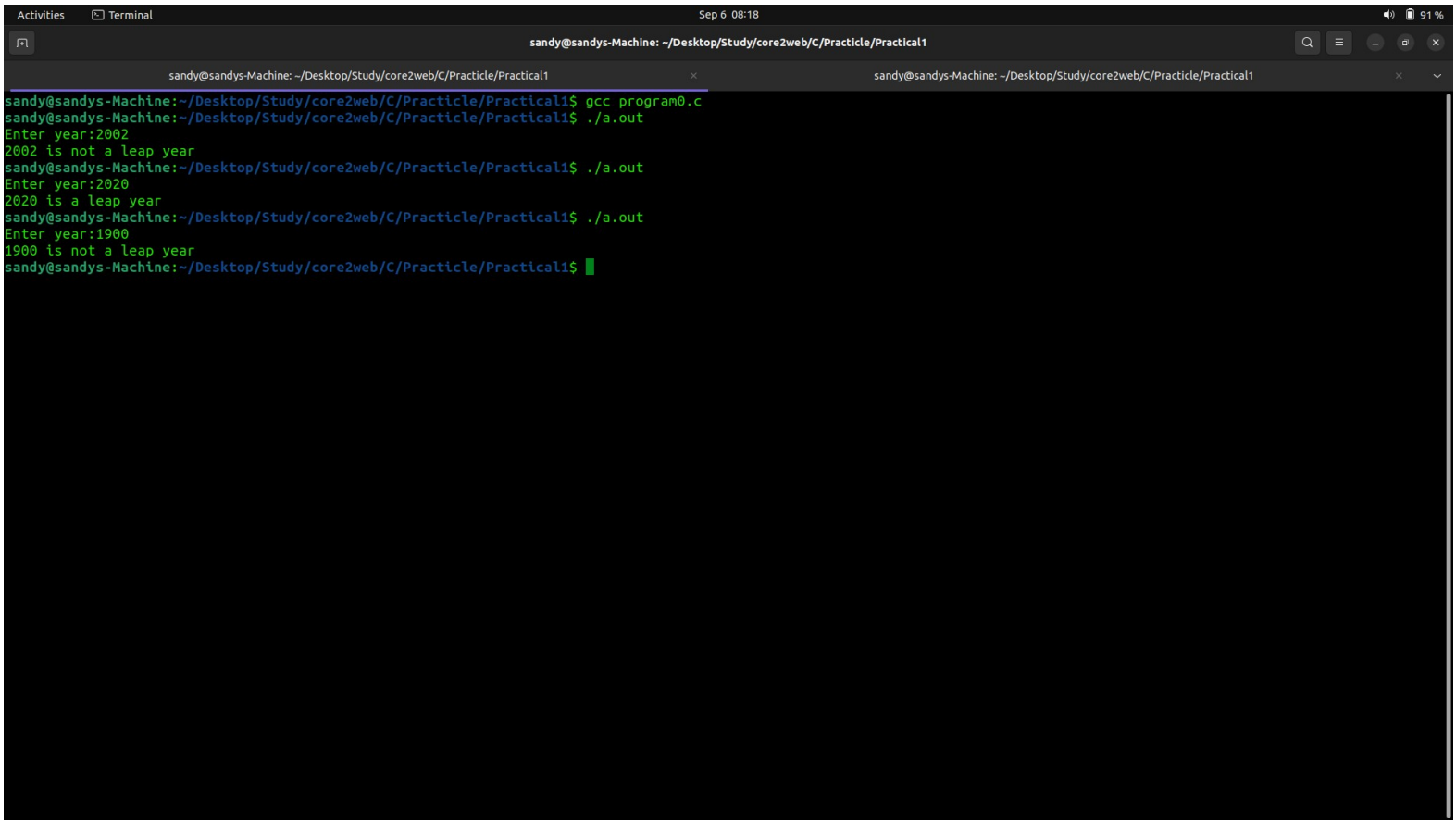
Practicle 1

Program 1:

Code:

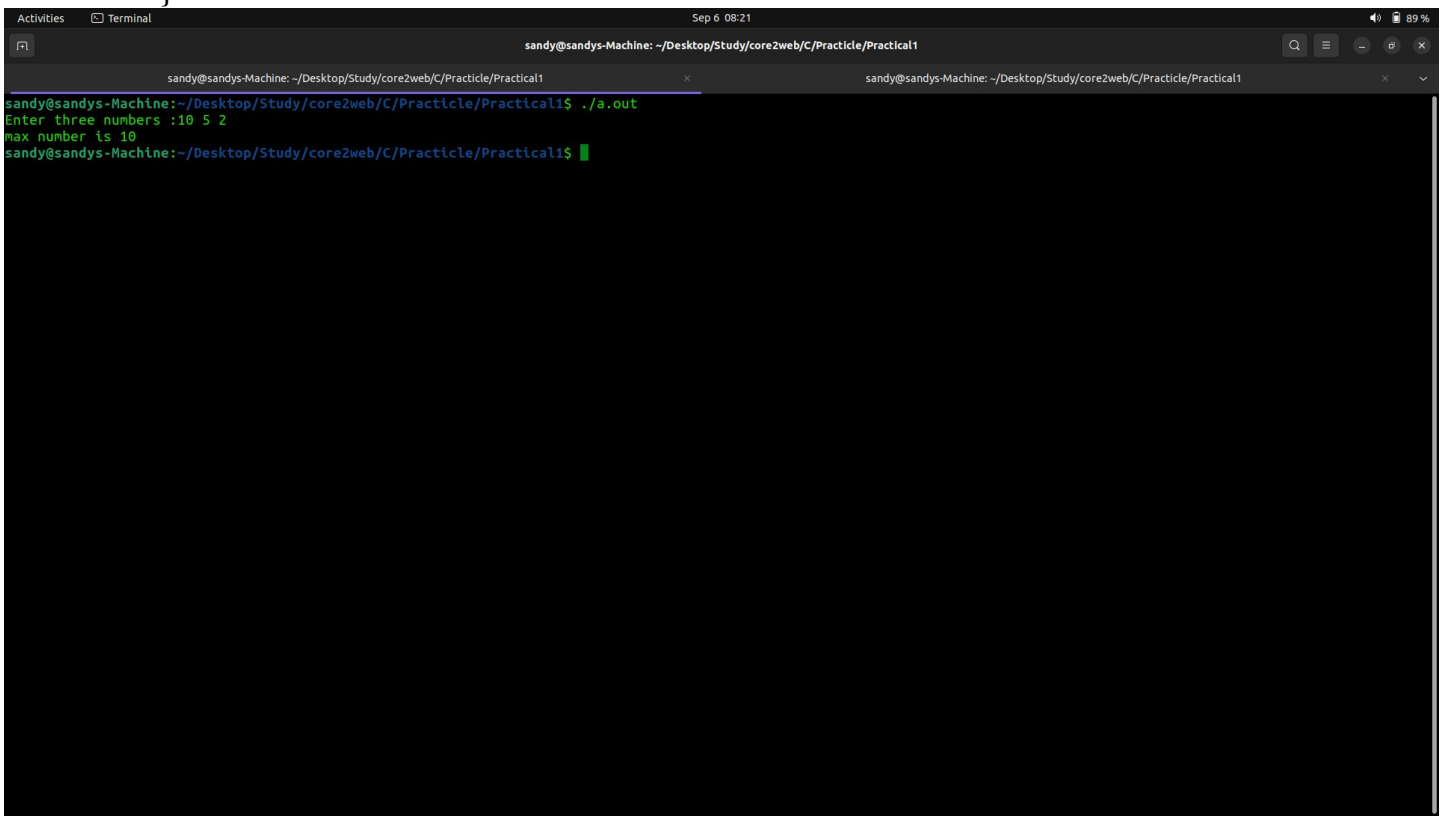
```
/*      Program1 : WAP to take check ehether the input is a leap year or not

 */

        #include<stdio.h>

        void main() {

                int year;

                printf("Enter year:");
                scanf("%d",&year);

                if( (year%400==0) || ((year%4 == 0) && (year%100!=0)))
                        printf("%d is a leap year\n",year);
                else
                        printf("%d is not a leap year\n",year);

        }
```



Program 2:

Code:

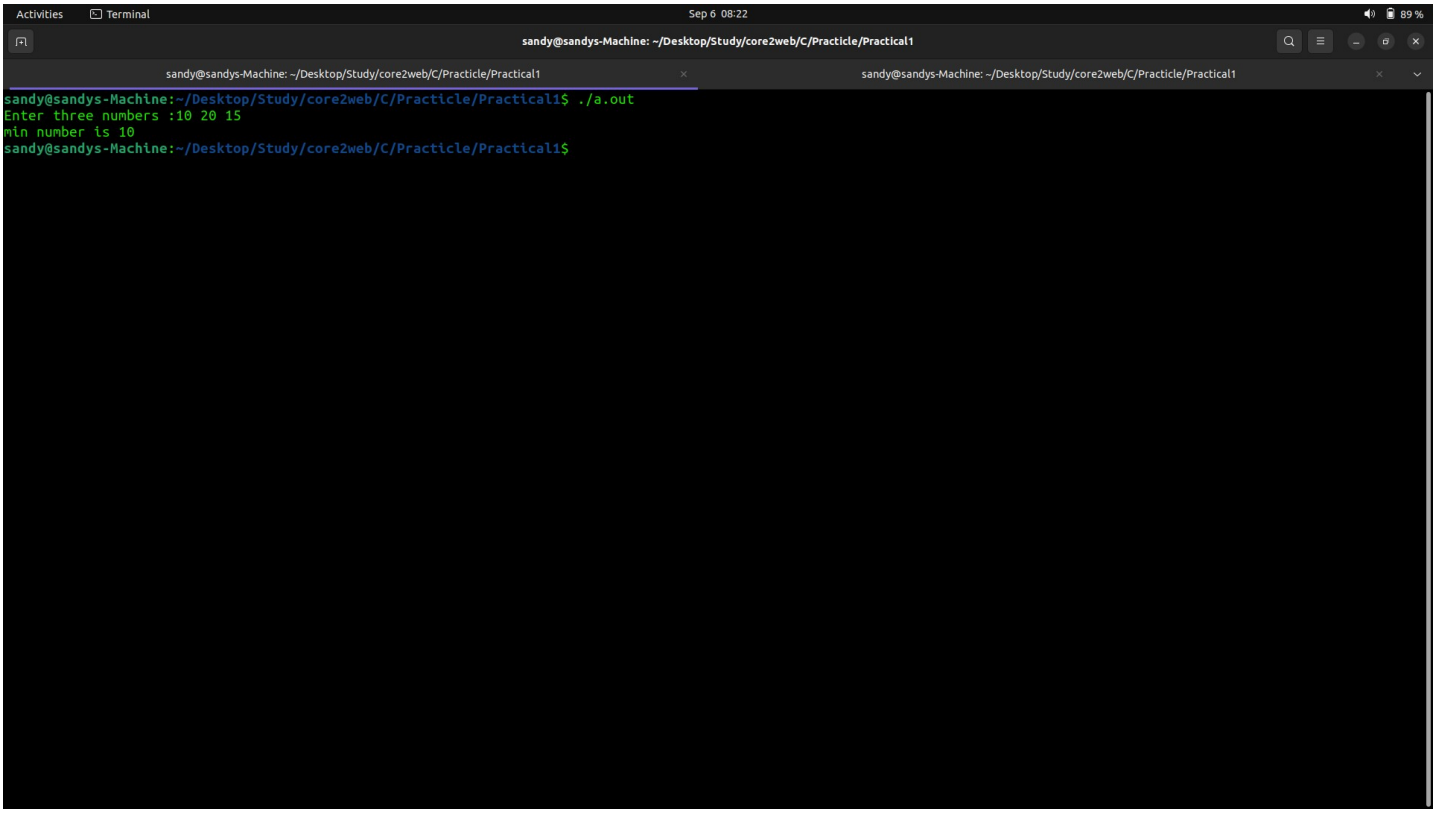
```
/*      Program2 WAP to find max among 3 numbers
 *
 * */

        #include<stdio.h>

        void main() {

                int num1,num2,num3;

                printf("Enter three numbers :");
                scanf("%d %d %d",&num1,&num2,&num3);
                if(num1 == num2 && num1 == num3) {
                        printf("%d , %d and %d are eual numbers\n",num1,num2,num3);

                }else {

                        if(num1 > num2 && num1 > num2)
                                printf("max number is %d\n",num1);
                        else if(num2 > num3)
                                printf("max number is %d\n",num2);
                        else
                                printf("max number is %d\n",num3);
                }

        }
```



Program 3:

Code:

```
/*
 *      Program2 WAP to find min among 3 numbers
 * */

        #include<stdio.h>

        void main() {

                int num1,num2,num3;

                printf("Enter three numbers :");
                scanf("%d %d %d",&num1,&num2,&num3);
                if(num1 == num2 && num1 == num3) {
                        printf("%d , %d and %d are eual numbers\n",num1,num2,num3);
                }else {

                        if(num1 < num2 && num1 < num2)
                                printf("min number is %d\n",num1);
                        else if(num2 < num3)
                                printf("min number is %d\n",num2);
                        else
                                printf("min number is %d\n",num3);
                }

        }
```

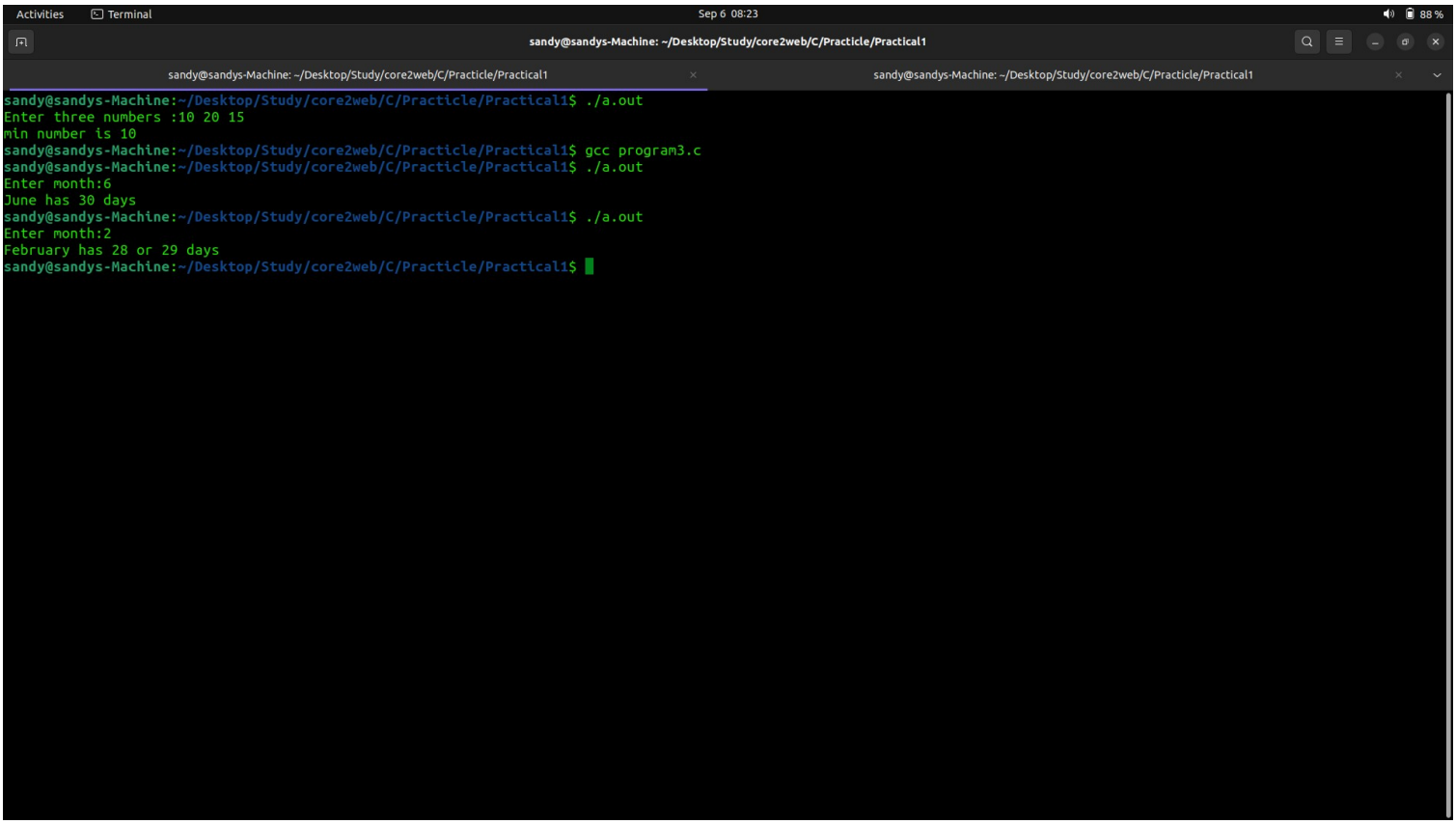


Program 4:

Code:

```
/*
 *      program 4:write a program according to the month number print the no of days in that
        months
 *
 */

        #include<stdio.h>

         void main() {

                 int month;

                 printf("Enter month:");
                 scanf("%d",&month);

                switch(month) {

                        case 1:
                                printf("January has 31 days\n");
                                break;
                        case 2:
                                printf("February has 28 or 29 days\n");
                                break;
                        case 3:
                                printf("March has 31 days\n");
                                break;
                        case 4:
                                printf("April has 30 days\n");
                                break;
                        case 5:
                                printf("May has 31 days\n");
                                break;
                        case 6:
                                printf("June has 30 days\n");
                                break;
                        case 7:
                                printf("July has 31 days\n");
                                break;
                        case 8:
                                printf("August has 31 days\n");
                                break;
                        case 9:
                                printf("September has 30 days\n");
                                break;
                        case 10:
                                printf("October has 31 days\n");
                                break;
                        case 11:
```

```
                printf("November has 30 days\n");
                break;
        case 12:
                printf("December has 31 days\n");
                break;
        default:
                printf("You entered invalid onth\n");
                break;
}}
```

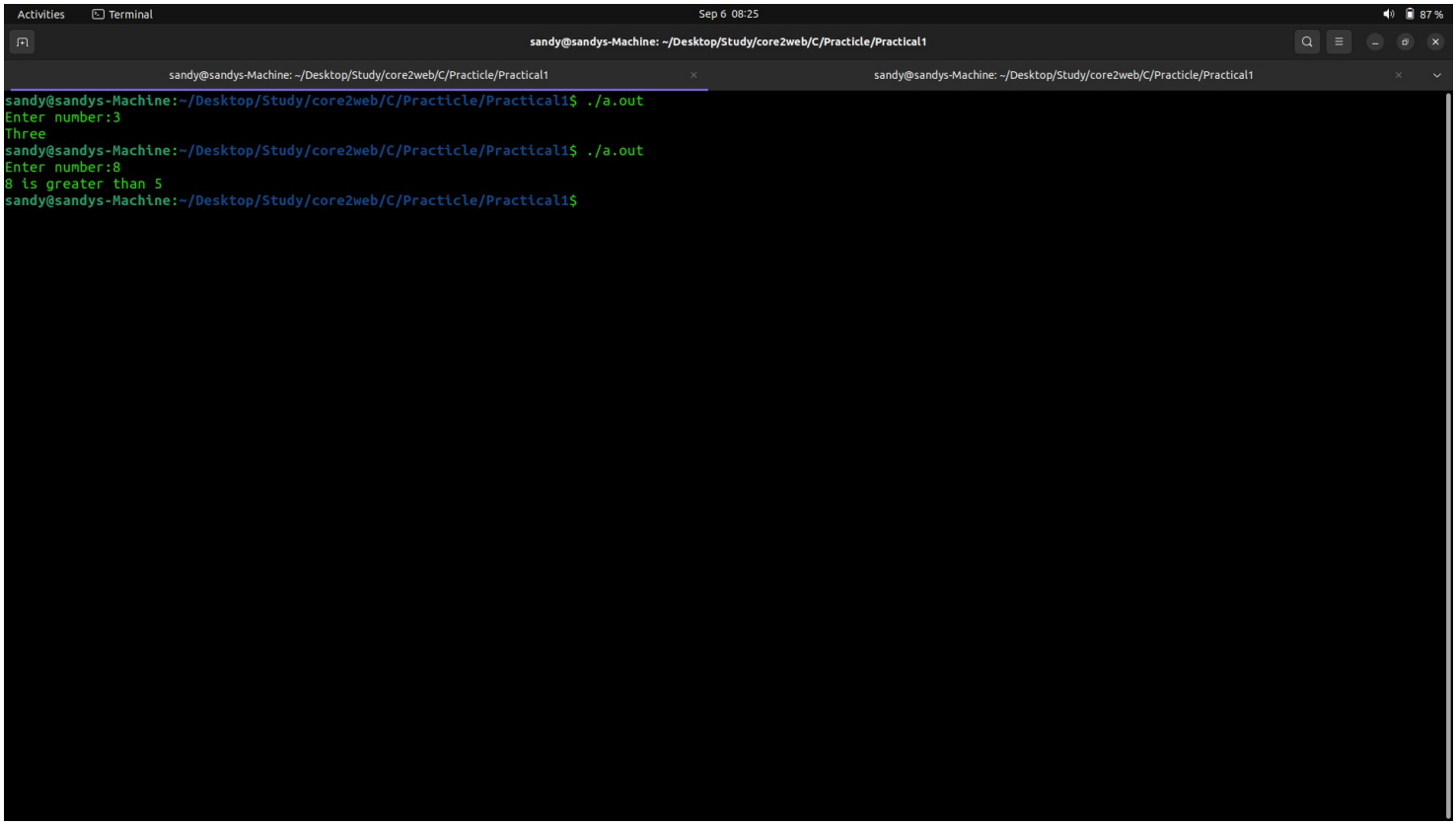


Program 5:

Code:

```
/*
 * Program 5: Write a program that takes a number from 0 to 5 and prints its spelling
 *        if the number is greater than 5 print entered number is greater than 5
 */


        #include<stdio.h>

        void main() {
                int num;

                printf("Eter number:");
```

```
scanf("%d",&num);
switch(num) {
        case 0:
                printf("Zero\n");
                break;
        case 1:
                printf("One\n");
                break;
        case 2:
                printf("Two\n");
                break;
        case 3:
                printf("Three\n");
                break;
        case 4:
                printf("Four\n");
                break;
        case 5:
                printf("Five\n");
                break;

        default:
                if(num>5)
                        printf("%d is greater than 5\n",num);
                else
                        printf("Enter number greater than 0\n");
                break;
}}
```



Program 6:

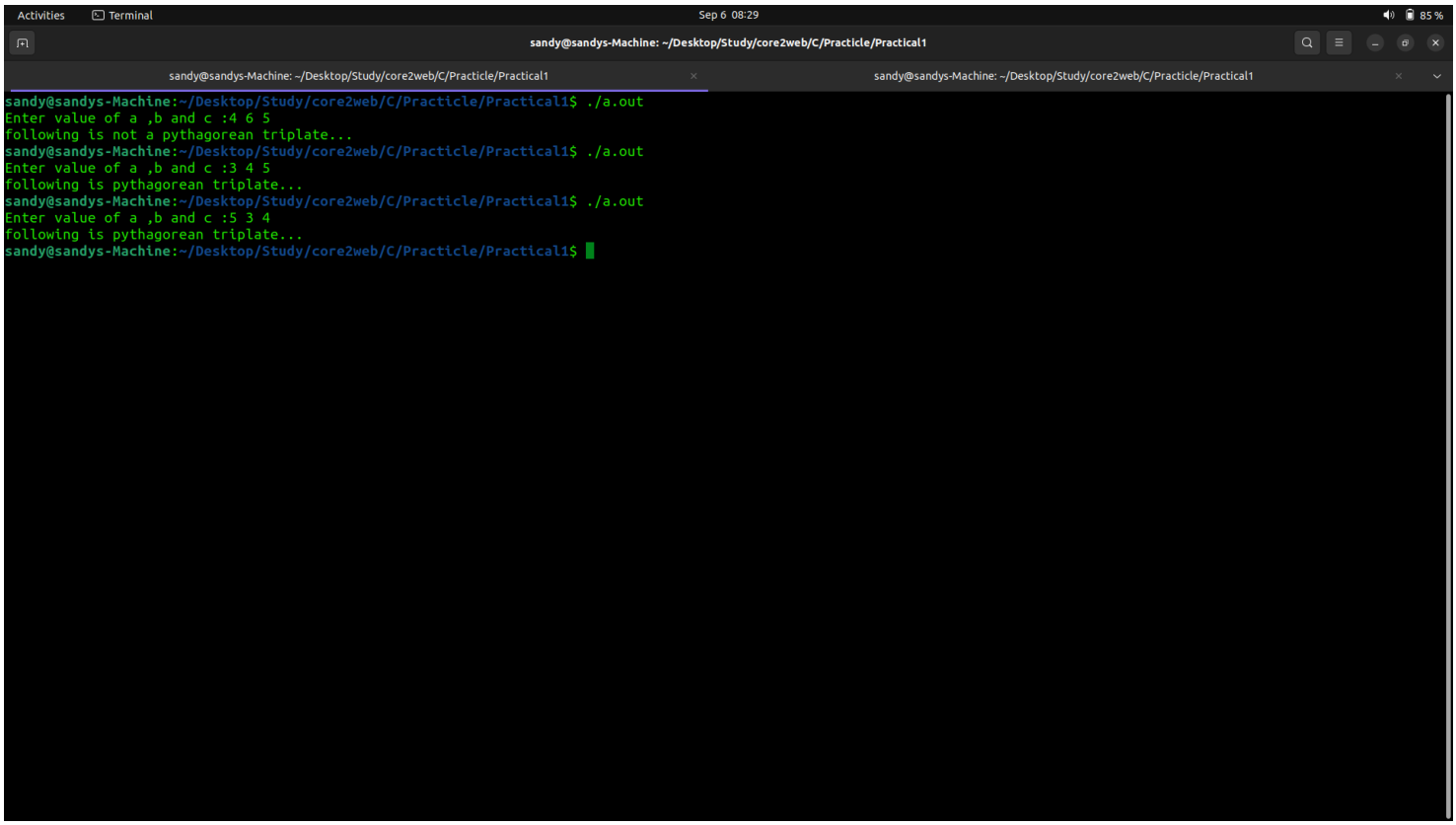
Code:

```
/*
 *      Program 6:      WAP to get 10 nubers from user and fint thei avg and sum
 */

        #include<stdio.h>

        void main() {

                int num,sum=0;
                float avg;

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

                        printf("Enter number %d:",i);
                        scanf("%d",&num);

                        sum = sum + num;
                }

                avg = (float)sum / 10;
                printf("Sum:%d\nAverage:%.2f\n",sum,avg);
        }
```

Program 7:

Code:

```
/*
 *      Program 7: WAP to check weather given input is a pythagorean triplate or not
 */

        #include<stdio.h>

        void main() {

                int a,b,c;

                printf("Enter value of a ,b and c :");
                scanf("%d %d %d",&a,&b,&c);

                int hypo;

                if(a>b && a>c ) {
                        hypo = a;
                        a = b;
                        b = c;
                }
                else if(b>c) {

                        hypo = b;
                        b = c;
                }else {

                        hypo = c;
                }

                if(a*a + b*b ==  hypo*hypo) {

                        printf("following is pythagorean triplate...\n");

                }else {

                        printf("following is not a pythagorean triplate...\n");
                }

        }
```

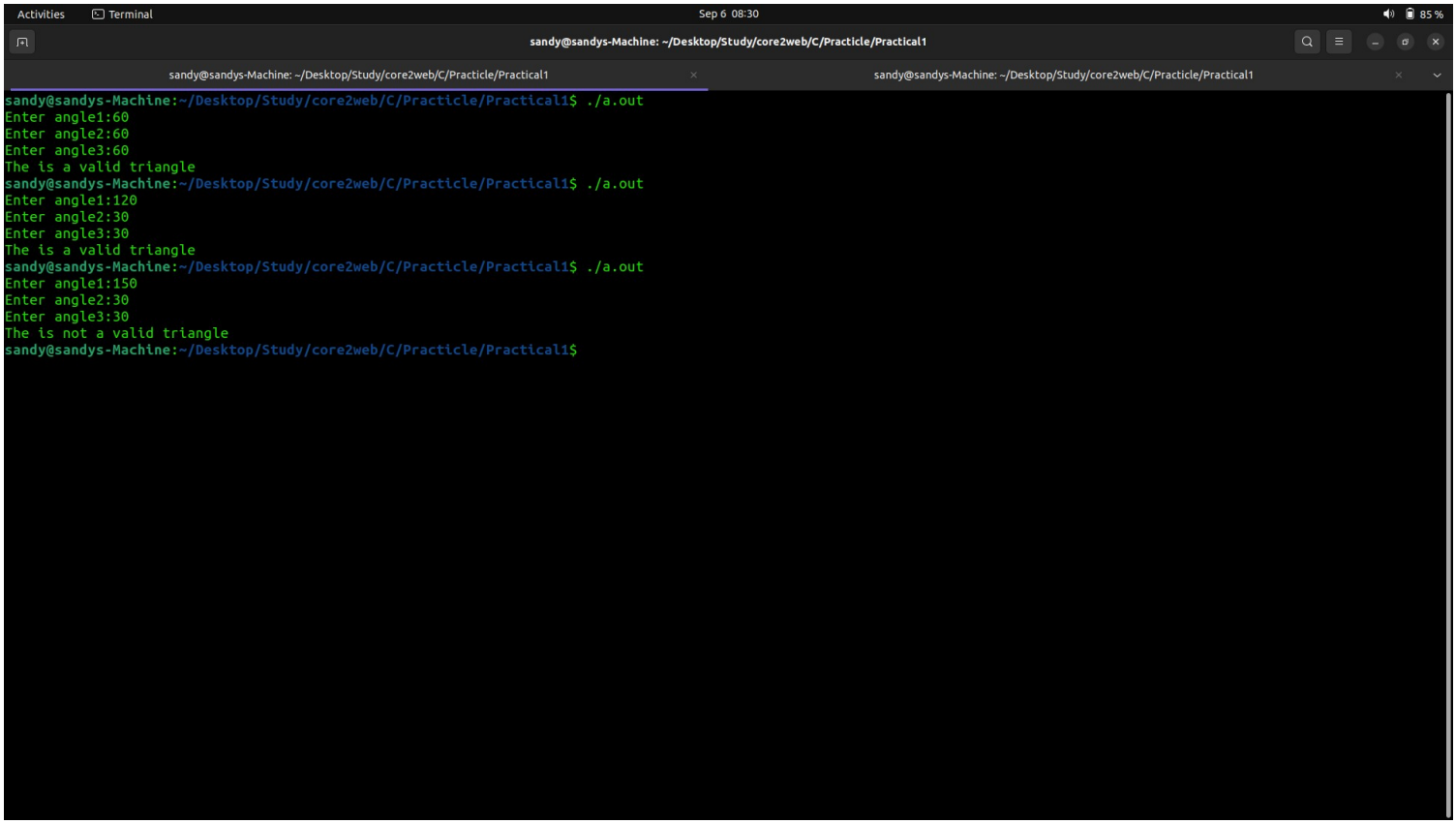


Program 8:

Code:

```
/*
 *      program 8 : WAP  taht takes angles of a triangle from user and print weather the angle is
        valid or not
 *
 */


        #include<stdio.h>

        void main() {

                int angle1,angle2,angle3;

                printf("Enter angle1:");
                scanf("%d",&angle1);

                printf("Enter angle2:");
                scanf("%d",&angle2);

                printf("Enter angle3:");
                scanf("%d",&angle3);

                if(angle1+angle2+angle3 == 180)
```

```
        printf("The is a valid triangle\n");
    else
        printf("The is not a valid triangle\n");

}
```

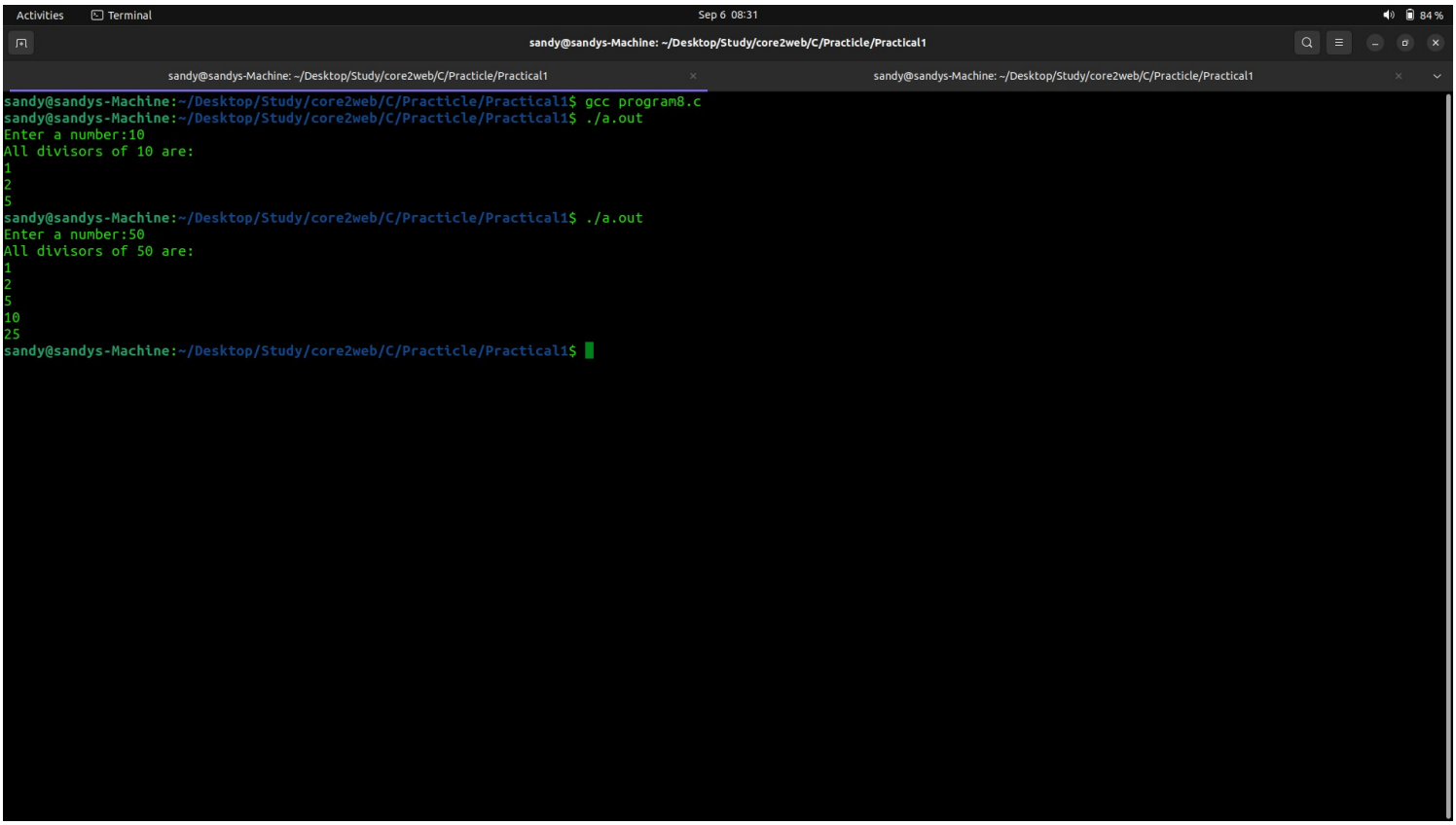


Program 9:

Code:

```
/*
 *      Program 9: Print all divisors of entered number
 */

#include<stdio.h>

void main() {

    int num;

    printf("Enter a number:");
    scanf("%d",&num);

    if(num<=0) {
```

```
		printf("Enter positive numbers only...\n");
	}else {

		printf("All divisors of %d are:\n",num);
		for(int i=1;i<=num/2;i++) {

			if(num%i==0)
				printf("%d\n",i);
		}

	}
}
```



Program 10:
Code:

```
/*
 *	Program 10: WAP take two characters if these characters are equal then print them as it is but if they are unequal then print their difference
 */

#include<stdio.h>

void main() {

	char ch1,ch2;
```

```
		printf("Enter character 1:");
		scanf("%c",&ch1);

		printf("Enter character 2:");
		scanf(" %c",&ch2);

		if(ch1 == ch2)
			printf("ch1:%c\tch2:%c\n",ch1,ch2);
		else {

			if(ch1>ch2)
				printf("The difference between %c and %c is :%d\n",ch1,ch2,ch1-
ch2);
			else
				printf("The difference between %c and %c is :%d\n",ch1,ch2,ch2-
ch1);

		}
	}
```