Practical:-1
Aim :- Wap to find ASCII value of a character.
Input :-

```
#include<stdio.h>

int main()
{
    char A;
    printf("Enter a character :");
    scanf("%c",&A);
    printf("ASCII value of %c =%d ",A,A);
    return 0;
}
```

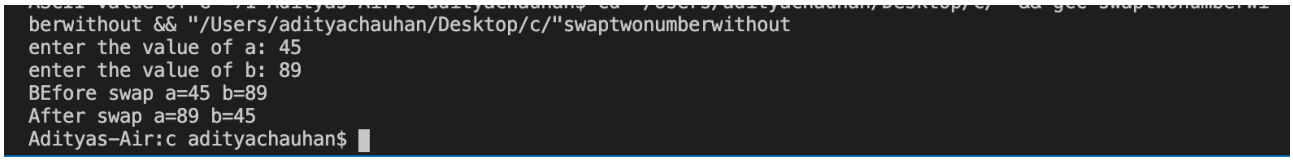
Output :-

```
cd "/Users/adityachauhan/Desktop/c/" && gcc ascii.c -o ascii && "/Users/adityachauhan/Desktop/c/"ascii

The default interactive shell is now zsh.
To update your account to use zsh, please run `chsh -s /bin/zsh`.
For more details, please visit https://support.apple.com/kb/HT208050.
Adityas-Air:c adityachauhan$ cd "/Users/adityachauhan/Desktop/c/" && gcc ascii.c -o ascii && "/Users/adityach
auhan/Desktop/c/"ascii
Enter a character :G
ASCII value of G =71 Adityas-Air:c adityachauhan$
```

Practical:-2
Aim :- Wap to swap two numbers without using third variable.
Input :-

```
#include<stdio.h>

int main()
{
    int a,b;
    printf("enter the value of a: ");
    scanf("%d",&a);
    printf("enter the value of b: ");
    scanf("%d",&b);
    printf("BEfore swap a=%d b=%d",a,b);
    a=a*b;
    b=a/b;
    a=a/b;
    printf("\nAfter swap a=%d b=%d\n",a,b);
    return 0;
}
```

Output :-



Practical:-3
Aim :-Wap to find roots of a quadratic equation.
Input :-

```
#include <math.h>
#include <stdio.h>

int main() {
    double a, b, c, discriminant, root1, root2, realPart, imagPart;
    printf("Enter coefficients a, b and c: ");
    scanf("%lf %lf %lf", &a, &b, &c);

    discriminant = b * b - 4 * a * c;
    if (discriminant > 0) {
        root1 = (-b + sqrt(discriminant)) / (2 * a);
        root2 = (-b - sqrt(discriminant)) / (2 * a);
        printf("root1 = %.2lf and root2 = %.2lf", root1, root2);
    }
    else if (discriminant == 0) {
        root1 = root2 = -b / (2 * a);
        printf("root1 = root2 = %.2lf;", root1);
    }
    else {
        realPart = -b / (2 * a);
        imagPart = sqrt(-discriminant) / (2 * a);
        printf("root1 = %.2lf+%.2lfi and root2 = %.2f-%.2fi", realPart, imagPart, realPart,
imagPart);
    }
    return 0;
}
```

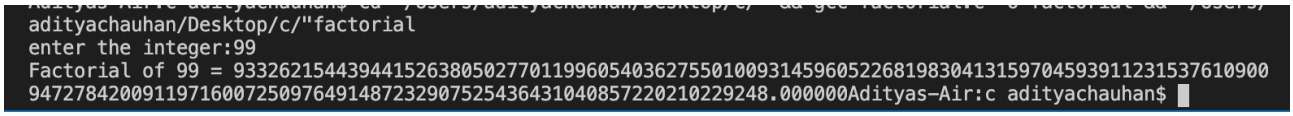
Output :-

```
Adityas-Air:c adityachauhan$ cd "/Users/adityachauhan/Desktop/c/" && gcc findtherootsofaquadratic.c -o findth
erootsofaquadratic && "/Users/adityachauhan/Desktop/c/"findtherootsofaquadratic
Enter coefficients a, b and c: 3
5
7
root1 = -0.83+1.28i and root2 = -0.83-1.28iAdityas-Air:c adityachauhan$
```

Practical:-4
Aim :-Wap to find Factorial of a number.
Input :-

```
#include<stdio.h>

long double  number(int n);

int main ()
{
    int n;
    printf("enter the integer:");
    scanf("%d",&n);
    printf("Factorial of %d = %Lf",n,number(n));
    return 0;
}
long double  number(int n)
{
    if (n>=1)
    {
        return n*number(n-1);
    }
    else
    {
        return 1;
    }

}
```

Output :-



Practical:-5
Aim :-Wap to generate multiplication table.
Input :-

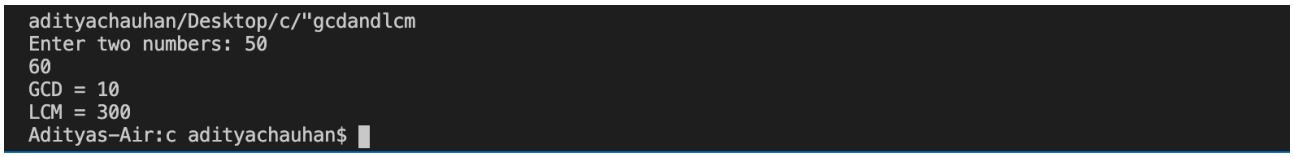
```
#include<stdio.h>

void tables(int);

int main()
{
    int num;

    printf("Enter a positive number\n");
    scanf("%d", &num);

    printf("\nMultiplication Table for %d is:\n", num);

    tables(num);

    return 0;
}

void tables(int num)
{
    int count;

    for(count = 1; count <= 10; count++)
    {
        printf("%d x %d = %d\n", num, count, num*count);
    }
}
```

Output :-

Practical:-6
Aim :-Wap to find GCD and LCM of two numbers.
Input :-

```
#include<stdio.h>
int main()
{
    int num1, num2, i, gcd, lcm;

    printf("Enter two numbers: ");
    scanf("%d %d", &num1, &num2);

    for(i=1; i<=num1 && i<=num2; i++)
    {
        if(num1%i==0 && num2%i==0)
            gcd=i;
    }

    lcm=(num1*num2)/gcd;

    printf("GCD = %d\n",gcd);
    printf("LCM = %d\n",lcm);

    return 0;
}
```

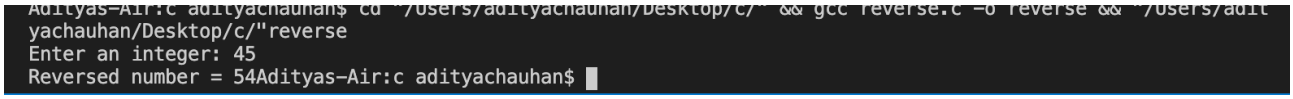
Output :-



Practical:-7
Aim :-Wap to reverse a number.
Input :-

```
#include <stdio.h>
int main() {
    int n, rev = 0, c;
    printf("Enter an integer: ");
    scanf("%d", &n);
    while (n != 0) {
        c = n % 10;
        rev = rev * 10 + c;
        n /= 10;
    }
    printf("Reversed number = %d", rev);
    return 0;
}
```

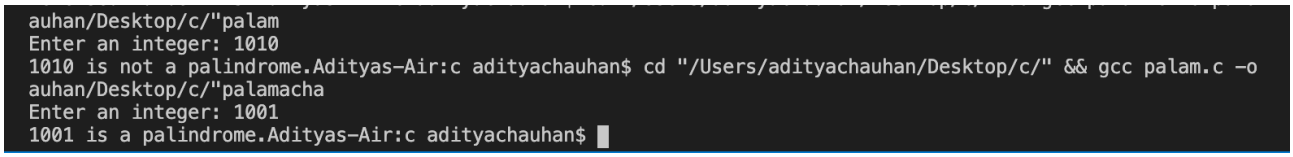
Output :-



Practical:-8
Aim :-Wap to check whether a number is palindrome or not.
Input :-

```
#include <stdio.h>
int main() {
    int n, reversedN = 0, remainder, originalN;
    printf("Enter an integer: ");
    scanf("%d", &n);
    originalN = n;
    while (n != 0) {
        remainder = n % 10;
        reversedN = reversedN * 10 + remainder;
        n /= 10;
    }
    if (originalN == reversedN)
        printf("%d is a palindrome.", originalN);
    else
        printf("%d is not a palindrome.", originalN);

    return 0;
}
```

Output :-



Practical:-9
Aim :-Wap to calculator using switch case
Input :-

```
#include <stdio.h>
int main() {
    char operator;
    double first, second;
    printf("Enter an operator (+, -, *,/): ");
    scanf("%c", &operator);
    printf("Enter two operands: ");
    scanf("%lf %lf", &first, &second);
    switch (operator) {
    case '+':
        printf("%.1lf + %.1lf = %.1lf", first, second, first + second);
        break;
    case '-':
        printf("%.1lf - %.1lf = %.1lf", first, second, first - second);
        break;
    case '*':
        printf("%.1lf * %.1lf = %.1lf", first, second, first * second);
        break;
    case '/':
        printf("%.1lf / %.1lf = %.1lf", first, second, first / second);
        break;
        default:
        printf("Error! operator is not correct");
    }
    return 0;
}
```

Output :-