**Assignment-2**

***Q1 -*** ***Write a C program to print all alphabets from a to z.***

***Ans- PROGRAM:***

#include <stdio.h>

**int** main()

{

**char** c;

**for** (c = 'A'; c <= 'Z'; ++c)

printf("%c ", c);

**return** 0;

}

***OUTPUT:***

***Graphical user interface, text, application, email

Description automatically generated***

***Q2 - Write a C program to print all even numbers between 1 to 100.***

***Ans- PROGRAM:***

#include<stdio.h>

**int** main(){

**for**(**int** i=1;i<=100;i++)

{

**if**(i%2==0)

{

printf("%d ", i);

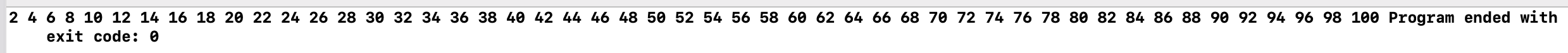
}

}

**return** 0;

}

***Output:***

******

***Q3 - Write a C program to find sum of all odd numbers between 1 to n.***

***Ans- PROGRAM:***

#include<stdio.h>

**int** main()

{

**int** i, number, Sum = 0;

printf("\n Please Enter the Maximum Limit Value : ");

scanf("%d", &number);

printf("\n Odd Numbers between 0 and %d are : ", number);

**for**(i = 1; i <= number; i++)

{

**if** ( i%2 != 0 )

{

printf("%d ", i);

Sum = Sum + i;

}

}

printf("\n \n The Sum of Odd Numbers from 1 to %d = %d\n", number, Sum);

**return** 0;

}

***Output:***

***Text

Description automatically generated***

***Q4 - Write a C program to print multiplication table of any number.***

***Ans- PROGRAM:***

#include <stdio.h>

**int** main()

{

**int** i, num;

printf("Enter number to print table: ");

scanf("%d", &num);

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

{

printf("%d \* %d = %d\n", num, i, (num\*i));

}

**return** 0;

}

***Output:***

***A picture containing table

Description automatically generated***

***Q5 - Write a C program to count number of digits in a number.***

***Ans- PROGRAM:***

#include<stdio.h>

**int** main()

{

**long** **int** num;

**int** count = 0, rem;

printf("Enter a number: ");

scanf("%ld", &num);

**while** (num != 0)

{

rem = num % 10;

num = num / 10;

count++;

}

printf("%d\n", count);

**return** 0;

}

***Output:***

***A picture containing text

Description automatically generated***

***Q6 - Write a C program to find first and last digit of a number.***

***Ans- PROGRAM:***

#include <stdio.h>

**int** main()

{

**int** n, firstDigit, lastDigit;

printf("Enter number = ");

scanf("%d", &n);

lastDigit = n % 10;

**while**(n >= 10)

{

n = n / 10;

}

firstDigit = n;

printf("first digit = %d and last digit = %d\n\n", firstDigit,lastDigit);

**return** 0;

}

***Output:***

***A picture containing text

Description automatically generated***

***Q7 - Write a C program to swap first and last digits of a number.***

***Ans- PROGRAM:***

#include <stdio.h>

#include <math.h>

**int** main()

{

**int** n,firstDigit, lastDigit,digits, swappedNum;

printf("Enter number = ");

scanf("%d", &n);

lastDigit = n % 10;

digits = (**int**)log10(n);

firstDigit = (**int**) (n / pow(10, digits));

swappedNum = lastDigit;

swappedNum \*= (**int**) round(pow(10, digits));

swappedNum += n % ((**int**)round(pow(10, digits)));

swappedNum -= lastDigit;

swappedNum += firstDigit;

printf("Number after swapping first and last digit: %d\n", swappedNum);

**return** 0;

}

***Output:***

***A picture containing text

Description automatically generated***

***Q8 - Write a C program to find frequency of each digit in each integer.***

***Ans- PROGRAM:***

#include <stdio.h>

#define BASE 10

**int** main()

{

**long** **long** num, n;

**int** i, lastDigit;

**int** freq[BASE];

printf("Enter any number: ");

scanf("%lld", &num);

**for**(i=0; i<BASE; i++)

{

freq[i] = 0;

}

n = num;

**while**(n != 0)

{

lastDigit = n % 10;

n /= 10;

freq[lastDigit]++;

}

printf("Frequency of each digit in %lld is: \n", num);

**for**(i=0; i<BASE; i++)

{

printf("Frequency of %d = %d\n", i, freq[i]);

}

**return** 0;

}

***Output:***

***Table

Description automatically generated***

***Q9 - Write a C program to enter a number and print it in words.***

***Ans- PROGRAM:***

#include <stdio.h>

#include <math.h>

**int** main()

{

**int** data, num = 0, digits;

printf("Enter any number to print in words: ");

scanf("%d", &data);

digits = (**int**) log10(data);

**while**(data != 0)

{

num = (num \* 10) + (data % 10);

data /= 10;

}

digits = digits - ((**int**) log10(num));

**while**(num != 0)

{

**switch**(num % 10)

{

**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**;

**case** 6:

printf("Six \n");

**break**;

**case** 7:

printf("Seven \n");

**break**;

**case** 8:

printf("Eight \n");

**break**;

**case** 9:

printf("Nine \n");

**break**;

}

num /= 10;

}

**while**(digits)

{

printf("Zero \n");

digits--;

}

**return** 0;

}

***Output:***

***Text

Description automatically generated***

***Q10 - Write a C program to print all ASCII character with their values.***

***Ans- PROGRAM:***

#include <stdio.h>

**int** main()

{

**int** i;

**for**(i = 0; i <= 255; i++)

{

printf("The ASCII value of %c = %d\n", i, i);

}

**return** 0;

}

***Output:***

***Table

Description automatically generated*** ***A picture containing computer, building

Description automatically generated***

***A picture containing building, computer

Description automatically generated A picture containing table

Description automatically generated***

***A picture containing table

Description automatically generated Text

Description automatically generated***