

ASSIGNMENT-1

By

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1ST SEMESTER

CSE (AI/ML)



Model Institute of Engineering & Technology (Autonomous)

(Permanently Affiliated to the University of Jammu, Accredited by NAAC with “A” Grade)

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1. Write a C program to print all three-digit Adam numbers.

```

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

int square(int n);
int squareroot(int n);
int reverse(int n);
void main()
{
    int p,l,k,m;
    for(int i = 100;i<=999;i++)
    {
        p = square(i);
        m = reverse(p);
        l = squareroot(m);
        k = reverse(l);
        if(i==k)
            printf("%d ", i);
        else
            continue;
    }
}

int square(int n)
{
    int x;
    x = n*n;
    return x;
}

int squareroot(int n)
{
    int x;
    x = (int)sqrt(n);
    return x;
}

int reverse(int n)
{
    int rem=0,ans=0;
    while(n){
        rem = n%10;
        ans = ans*10 + rem;
        n/=10;
    }
    return ans;
}

```

PROBLEMS DEBUG CONSOLE OUTPUT TERMINAL

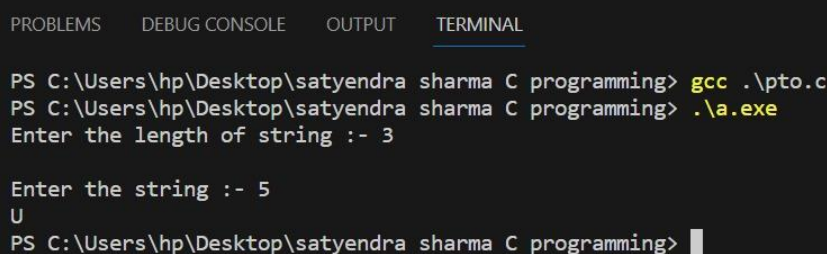
```

PS C:\Users\hp\Desktop\satyendra sharma C programming> gcc .\pto.c
PS C:\Users\hp\Desktop\satyendra sharma C programming> .\a.exe
101 102 103 111 112 113 121 122 201 202 211 212 221 301 311
PS C:\Users\hp\Desktop\satyendra sharma C programming> █

```

2. The following letters of the English alphabet are vowels: a, e, i, o, and u.
You are given a string named str of length n. Find and print the most frequent vowel in str.

```
#include <stdio.h>
#include <string.h>
void main()
{
    int n,ca=0,ce=0,ci=0,co=0,cu=0;
    printf("Enter the length of string :- ");
    scanf("%d", &n);
    char str[n];
    printf("\nEnter the string :- ");
    gets(str);
    gets(str);
    for(int i = 0; i < n; i++)
    {
        if(str[i] == 'a')
            ca++;
        else if(str[i] == 'e')
            ce++;
        else if(str[i] == 'i')
            ci++;
        else if(str[i] == 'o')
            co++;
        else if(str[i] == 'u')
            cu++;
    }
    if(ca>ce&&ca>ci&&ca>co&&ca>cu)
        printf("A");
    else if(ce>ci && ce>co && ce>cu)
        printf("E");
    else if(ci>co&&ci>cu)
        printf("I");
    else if(co>cu)
        printf("O");
    else
        printf("U");
}
```



```
PROBLEMS  DEBUG CONSOLE  OUTPUT  TERMINAL
PS C:\Users\hp\Desktop\satyendra sharma C programming> gcc .\pto.c
PS C:\Users\hp\Desktop\satyendra sharma C programming> .\a.exe
Enter the length of string :- 3

Enter the string :- 5
U
PS C:\Users\hp\Desktop\satyendra sharma C programming> █
```