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.***

```c
#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;
}
```

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.

```c
#include <stdio.h>
#include <string.h>
void main()
{
```

```c
    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");
}
```