

## Assignment-2

### \* principal of programming language \*

Ans-1- Pseudo code for prime Numbers

#### • Pseudo code:-

- Input N and M
- While N is Smaller than M
- Initialize I to 1000.
- While I is Smaller than N.
  - If N is divisible by I.
  - Skip loop
  - INCREMENT I
  - If N is equal to I.
  - Print N
- Increment N.

#### • Source code:-

```
#include <stdio.h>
int main{
    for (int i=1; i<=1000; i++){
        if (prime(i)){
            printf("Prime Number");
        }
        else {
            printf("Non-prime Number");
        }
    }
    return 0;
}
```

```
int prime (int n){
    for (int j=1; j<=n; j++){
        if (n%j == 0){
            count++;
        }
    }

    if (count == 2){
        return 1;
    }
    else {
        return 0;
    }
}
```

Ans-2. #include <stdio.h>

```
int incr (int count)
{
    count++;
    return count;
}
```

```
int main ( )
{
```

```
    char ans;
```

```
    printf ("Hello! Are u new to Upes press  
            Y for Yes and N for No:");
```

```
    scanf ("%d", &ans);
```

```

int count = 0;
int ans2 = 0;
if (ans == 'Y'){
    do{
        printf("Hello! Are u new to UPES
               press 1 for Yes 0 for No:")
        scanf ("%d", &ans2)
        int result = result + incr(count);
        if (ans2 == 0){
            printf("The total No. of new
                   visitor today is: %d", result);
        }
    }
    while (ans2 == 1);

else if (ans == 'N'){
    printf("The total No. of new visitor today
           is: %d", result);
}
else{
    printf("");
}
return 0;
}
  
```



Ans-3- #include <stdio.h>

int integer (int n){

if (n == 0)

return 0;

else

return (n%2 + 10 \* integer(n/2))

}

Void main()

{

int n;

printf("Enter a integer number : \n");

scanf("%d", &n);

printf("Integer (%d) = Binary (%d) \n",  
n, integer(n));

}

// Procedure for Converting decimal to Binary.

Step1: Start

Step2: Input an Decimal Number

Step3: Read the Decimal Number and Make an Integer Number function. then call it.

Step4: Is n equal to 0

Return 0 value

Not

Then return  $n\%2 + 10 * (n/2)$

Step5: print the Output Binary Number.

Step6: Stop.

Ans-4-

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

```
int main()
```

```
{ int a[100] = {1, 2, 3, ..., 100}
```

```
for (int i = 0; i < 100; i++) {
```

```
printf("The Number with position  
a[%d]: %d", i, a[i]);
```

```
}
```

```
return 0;
```

```
}
```

Ans-5-

// Palindrome or Not //

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

```
int main()
```

```
{
```

```
int n;
```

```
printf("Enter the Number:");
```

```
scanf("%d", &n);
```

```
int org = n;
```

```
int count = 0;
```

```
while (n > 0) {
```

```
int last digit = n % 10;
```

```
count = count * 10 + last digit;
```

```
n /= 10;
```

```
}
```

```
if (count == org){  
    printf("Palindrome Number");  
}  
else {  
    printf("Non-Palindrome Number");  
}  
  
return 0;  
  
}
```