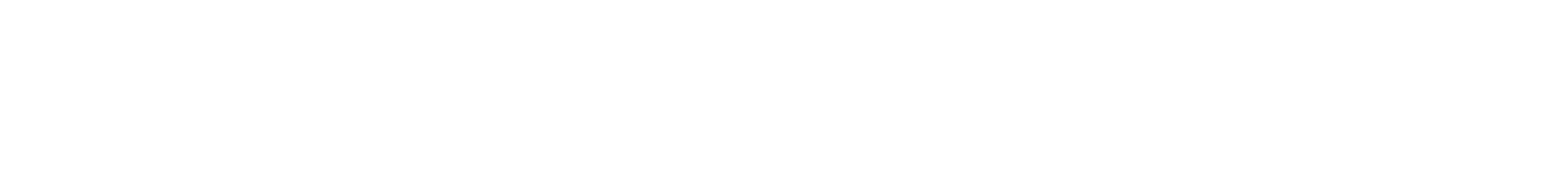
# **BACHELOR IN INFORMATION TECHNOLOGY**



# **ASSIGNMENT**

**Submitted by:** **Submitted to:**

Name: Bishal Bhattarai Lincoln University

Year/ Semester: First, Fall 2019

LCID: LC00017000753

# **Date: 2020.06.27**

1. Write a program in C to print all the prime numbers between 1 and 100.

 Solution:

#include <stdio.h> int main ()

{

int i, Number, count;

printf(" Prime Number from 1 to 100 are: \n");

for(Number = 1; Number <= 100; Number++)

{ count = 0;

for (i = 2; i <= Number/2; i++)

{

if(Number%i == 0)

{ count++; break;

}

}

if(count == 0 && Number != 1 )

{

printf(" %d ", Number);

}

}

return 0;

}

Output: Prime Number from 1 to 100 are: 2 3 5 7 11 13 17 19 23

29 31 37 41 43 47 53 59 61 67 71 73 79 83 89 97

2. Write a program in C to generate following pattern: 1 23 456 78910 Solution:

#include<stdio.h>

int main()

{

int rows, i, j, number= 1; printf("Enter number of rows: ");

scanf("%d", &rows);

for (i=1; i<=rows; i++)

{

for (j=1; j<=i; ++j)

{

printf("%d ", number);

++number;

}

printf("\n");

} return 0;

}

3. Write a menu driven program using switch case to calculate

1. Area of circle
2. Area of sphere

 Solution: #include <stdio.h>

void main ()

{ int choice,r; float area; printf("Input 1 for area of circle\n"); printf("Input 2 for area of sphere\n"); printf("Input your choice : "); scanf("%d",&choice);

switch(choice)

{ case 1:

printf("Input radius of the circle : "); scanf("%d",&r); area=3.14\*r\*r; break; case 2:

printf("Input radius of the sphere : "); scanf("%d",&r); area=4\*3.14\*r\*r;

break;

}

printf("The area is : %f\n",area);

}

4. Some text file is given; create another text file replacing the following words

“Ram” to “Hari”, “Sita” to “Gita”, and “Govinda” to “Shiva”. Define a

structure Employee having data members name, address and salary. Take data for n employee in an array dynamically and find the average salary.

 Solution: #include<stdio.h> #include<conio.h>

void main()

{

FILE \*fp,\*fpp; char c[10]; fp=fopen("cat.txt","r"); if(fp==NULL)

{

printf("The file named cat.txt cannot be opened"); exit(1);

}

fpp=fopen("dog.txt","w");

if(fpp==NULL)

{

printf("File with the name dog.txt cannot be created"); exit(1);

}

while(fscanf(fp,"%s",c)!=EOF)

{

if(strcmp(c,"Ram")==0) fprintf(fpp,"Hari",c); else if(strcmp(c,"Sita")==0) fprintf(fpp,"Gita",c); else if(strcmp(c,"Govinda")==0)

fprintf(fpp,"Shiva",c); else fprintf(fpp,"%s",c);

}

printf("completed!"); fclose(fp);

fclose(fpp);

}

 Solution:

#include<stdio.h> #define n 5 int main()

{

struct employee

{

char name[30]; char address[30]; float salary; }s[n];

int i;

float avgsalary,sum=0; //Loop to read data for n employee for(i=0;i<n;i++)

{

printf("\nEnter details of employee %d\n",i+1); printf("Enter name:"); fgets(s[i].name,30,stdin); printf("Enter salary:"); scanf("%f",&s[i].salary); fflush(stdin); printf("Enter address:"); fgets(s[i].address,30,stdin);

}

//Loop to find the sum of salary of all employees for(i=0;i<n;i++)

{

sum=sum+s[i].salary;

}

avgsalary=sum/n;

printf("Average salary of employee:%f",avgsalary);

return 0;

}