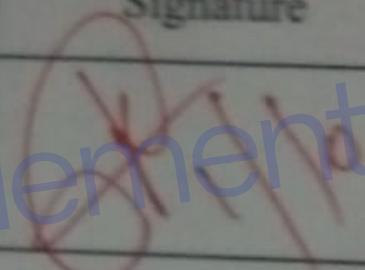
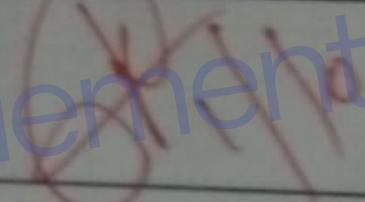
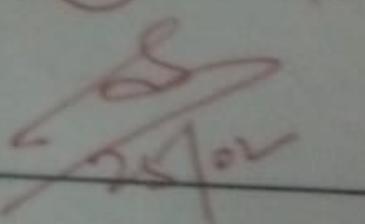
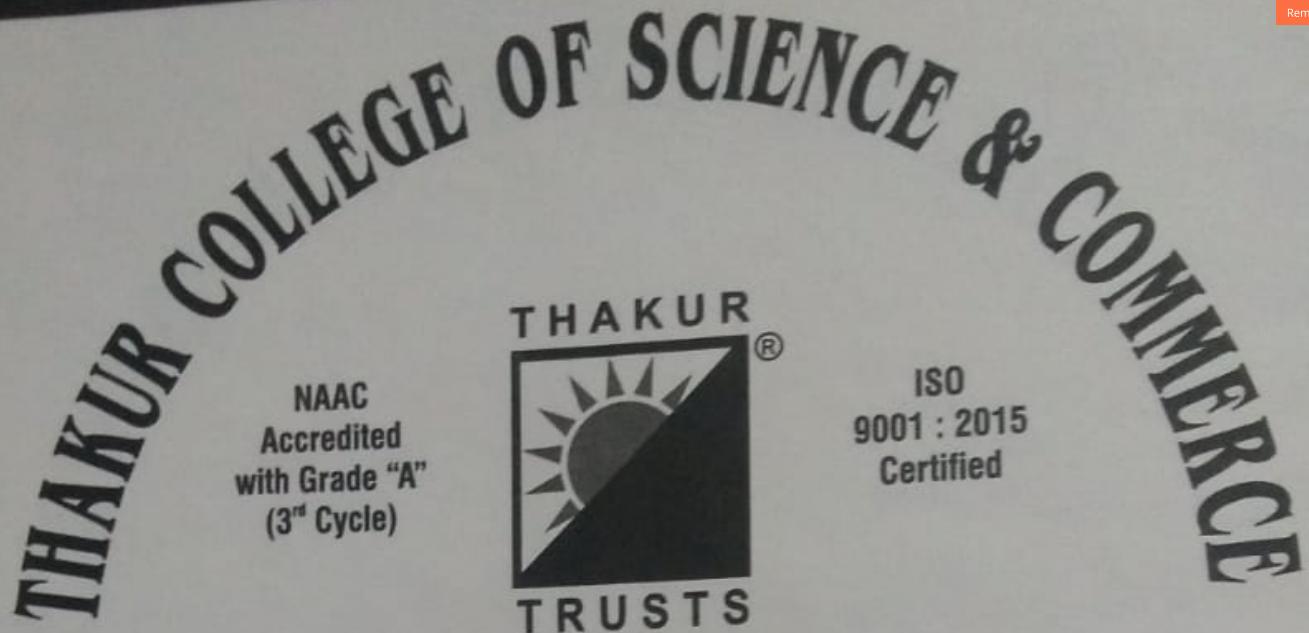


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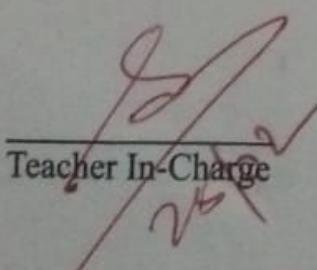
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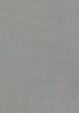
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Examiner

★ ★ INDEX ★ ★

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Poactical no-1:

Aim: Program to understand basic output and input of data types.

Program 1: Area of rectangle.

Source code:

```
#include <stdio.h>
#include <conio.h>
void main()
{
    int l, b, area;
    printf("Enter the numbers");
    scanf("%d %d", &l, &b);
    area = l*b
    printf("The area is %d");
    getch();
}
```

as

output:-

program 1:

Enter the number: 5 8

The area is 40



18

program 2: volume of sphere

Source code

```
#include <stdio.h>
#include <conio.h>
void main()
{
    clrscr();
    float r, v, pi;
    printf("Enter the radius");
    scanf("%f", &r);
    pi = 3.14;
    v = 4.0 / 3.0 * pi * r * r * r;
    printf("The volume is %f", v);
    getch();
}
```

Program 3: Average of three numbers.

Source code:

```
#include <stdio.h>
#include <conio.h>
void main()
{
    clrscr();
    float a, b, c, avg;
    printf("Enter the num:");
    scanf("%f %f %f", &a, &b, &c);
    avg = (a + b + c) / 3;
    printf("Avg %f", avg);
    getch();
}
```

output: program 2

Enter radius: 7

The volume is: ~~1436.026733~~



Output 3

~~Enter the num 5 5 2~~

~~avg : 4.0~~

Program 4: convert temp to celcius to farenheit.

Source code:

```
#include <stdio.h>
#include <conio.h>
void main()
{
    float c, temp;
    clrscr();
    printf("Enter the temp in celcius");
    scanf("%f", &c);
    temp = (c * 9/5) + 32;
    printf("The converted value is %f", temp);
    getch();
}
```

28.

Output

Enter the value of radius: 3

Surface = 37.900 002



88

programs: function to convert

some code:

```
#include <stdio.h>
#include <conio.h>
void main()
{
    float f,dmp;
    clrscr();
    printf("Enter the dmp in feet:");
    scanf("%f",&dmp);
    dmp = (5.0/9.0) * (f - 32);
    printf("The converted dmp in celsius is %f",dmp);
    getch();
}
```

output

given the value : 80

answer: 26.66

31

25%
100

pdfelement

Practical no - 2,

Aim: Programs on operator and Expression.

Program: Increment and Decrement.

Source code:

```
#include<stdio.h>
#include<conio.h>
void main()
{
    int a,b,c,d;
    a=25, b=10;
    printf("In a=%d, b=%d, c=%d, d=%d",a,b,c,d);
    c=++a-b;
    d=b++-a;
    printf("In a=%d, b=%d, c=%d, d=%d",a,b,c,d);
    c=a-b;
    d=a/b;
    printf("In c=%d, d=%d",c,d);
    getch();
}
```

18

Output

$a = 25, b = 10$

$a = 26, b = 11, c = 16, d = 36$

$c = 4, d = 2$



28

program 2: operator procedure.

source code

```
#include <stdio.h>
#include <conio.h>
void main()
{
    float a, b, c, x, y, z;
    a = 8;
    b = 15;
    c = 3;
}
```

printf ("The value of a=%f, b=%f, c=%f\n", a, b, c);
x = a - b / (3 + c) * 2 - 1;
y = a - b / (3 + c) * (2 - 1);
z = a - b / (3 * c) * 2) - 1;
printf ("The value of x=%f, y=%f, z=%f\n", x, y, z);

```
getch();
```

output

36

The value of $a = 8.0$, $b = 15$, $c = 3$

The value of $x = 8.5$, $y = 8.500$, $z = 2.00$



program - 3

Source code

```
#include <conio.h>
#include <StlIO.h>
void main ()
{
    int a,b,c,ans;
    a=6;
    b=4;
    c=1;
    ans = ++a * b + b++ ; // c++ ;
    cout << "The value of a = " << a << ", b = " << b << ", c = " << c << ", and ans = " << ans << endl;
    getch ();
}
```

Q8:

Output:

The value of $a=7, b=5, c=1, \text{ans}=1$



658

program :-

```
#include <stdio.h>
#include <conio.h>
void main()
{
    a, b, c, x;
    x = 10;
    a = x + 7;
    b = -x;
    c = x + 1 * --b;
    getch();
}
```

Output:- The value of a= 7. d ; b= 7-d , c= 7+d
& x= 7. a,b,c,d(7)

output

38

The value of a=10, b=9, c=90 & x=11

SP
25/02

pdfelement

3.9

Practical - 3

Aim:

Source code

Program for Even and odd.

```
#include < stdio.h >
#include < conio.h >
void main()
{
    int n;
    printf("Enter a number : ");
    scanf("%d", &n);
    if (n % 2 == 0)
        printf("It is an even number");
    else
        printf("It is an odd number");
    getch();
}
```

88.

Output

Enter a num: 5

It is an odd:

Enter a num: 2

It is an even



P8

Program 2: leap year

Source code

```
#include <stdio.h>
#include <conio.h>
void main()
{
    int year;
    printf("Enter a year");
    scanf("%d", &year);
    if (year % 4 == 0);
        printf("It is a leap year");
    else;
        printf("It is not a leap year");
    getch();
}
```

code output:

40

Enter an year : 2021
~~It is not a leap year.~~



program - 3 - Find the greater number

Code

```
#include <stdio.h>
#include <conio.h>
void main()
{
    int a, b, c;
    printf("Enter 3 no");
    scanf("%d %d %d", &a, &b, &c);
    if (a > b) && (a > c)
        printf("In a is greater");
    else if ((b > a) && (b > c))
        printf("In b is greater");
    else
        printf("In c is greater");
    getch();
}
```

Q4

Output : enter 3 no 3

a=7

b=1

b is even



14

Program to check consonant or vowel

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

```
#include < conio.h>
```

```
Void main();
```

{

```
printf("Enter an Alphabet");
```

```
scanf("%c", &ch);
```

```
If (ch == 'a' || ch == 'A' || ch == 'e' || ch == 'E' || ch == 'i' || ch == 'I' || ch == 'o' || ch == 'O')
```

```
else
```

```
printf("Entered character is consonant");
```

```
getch();
```



output

Order on alfabet g
from this wordset



89
25702

Practical no 4:

Aim: program to understand looping structure
while loop.

program to print even number upto 100

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

```
# include < conio.h >
```

```
void main()
```

```
{
```

```
int i;
```

```
for (i = 2, i < 100; i = i + 2)
```

```
    getch();
```

```
}
```

~~2 # include < stdio.h >~~

~~# include < conio.h >~~

~~void main()~~

~~{~~

~~int i, n, &;~~

~~printf("Enter value of n: ")~~

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

~~i = 1;~~



Output

2

4

6

8

10

:

100

output

7

14

21

:

56

63

70

64

```

while (i < n)
{
    x = i * 10;
    if (x == 0)
    {
        printf("i = %d\n", i);
    }
    i++;
}

```

* Program 3.

```

#include <stdio.h>
#include <conio.h>

```

```

void main()
{

```

```

    int i, n, x, sum;
    printf("Enter value of n");
    scanf("%d", &n);
    i = 1;
    sum = 0;

```

```

    do

```

```

        x = i * 2;

```

```
if (cc == 1)
{
    sum = sum + i;
}
++i;
}
while (cc == n);
cout << "sum of all odd num is " << cc << endl;
```



* program 4:

```
#include < stdio.h >
#include < conio.h >
void main()
{
    int i, n;
    i = 1;
    while (i <= 5)
    {
        n = 1;
        while (n <= 5)
        {
            printf("%d\t", i);
            n++;
        }
        printf("\n");
        i++;
    }
    getch();
}
```

FB

output

1

1 2

1 2 3

1 2 3 4

1 2 3 4 5



⇒ For loop

```
#include <strobo.h>
#include <conio.h>
void main()
{
    int i, n;
    for (i = 1; i <= n; i++)
    {
        for (int j = 1; j <= i; j++)
            printf("%*c", j, '*');
        printf("\n");
    }
    getch();
}
```

→

46

Output



47

```
#include <strobo.h>
#include <conio.h>
void main()
{
    int i, u;
    for (i = 5, u = 1; i > 1; i--)
    {
        for (u = 1, u = i - u - 1)
        {
            putsf(" " * u, u);
        }
        putsf("\n");
        getch();
    }
}
```

Output

1 2 3 4 5

2 3 4 5

3 4 5

4 5

* Fibonacci series :

include < stdio.h >

include < conio.h >

void main()

int a, b, i, b;

printf ("fibonacci no")

a=1

b=0

printf ("a=%d", b);

for (i=3; i<=20; i++)

f=a+b;

printf ("a=%d", f);

a=b

b=f

3

getch();

Output

48

pdfelement

Practical no. 5.

Aim: To understand arrays.

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

```
# include < conio.h >
```

```
void main()
```

```
{
```

```
int i, num[5], sum = 0;
```

```
printf("Enter 5 numbers ");
```

```
for (i=0; i<5; i++)
```

```
printf("In Element array %d ", i+1);
```

```
for (i=0; i<5; i++)
```

```
for (i=0; i<5; i++)
```

```
sum = sum + num[i];
```

```
printf("Sum of elements is %d ", sum);
```

```
getch();
```

8P

Output

3
4
5
6
7

~~order elements in array are : 3, 4, 5, 6, 7
sum of elements are : 25~~



```
#include <conio.h>
#include <stdio.h>
void main()
```

```
{  
int i; num[10]; l;  
printf("In 10 value of array")  
for (i=0; i<10; i++)  
    sum = sum + num[i];  
    if (sum == 0);  
    for (i=0; i<10; i++)  
        if (num[i] == 0);  
            l = num[i];  
if (l == 0);  
    l = num[i];  
}
```

3
printf("In 10 value of array")
for (i=0; i<10; i++)
 sum = sum + num[i];
 if (sum == 0);
 for (i=0; i<10; i++)
 if (num[i] == 0);
 l = num[i];
if (l == 0);
 l = num[i];
}

from the array :-

- 55
- 22
- 5
- 3
- 9
- 11
- 16
- 19
- 20

50

no of positive value is 6

Find the sum of prime no in the array.

#include < stdio.h >

#include < conio.h >

void main()

{

int i, num[10]; p;

pointf ("Enter the elements in array");

for (i = 0; i < 10; i++)

scanf ("%d", &num[i]);

p = 1;

for (i = 0; i < 10; i++)

{ if (num[i] > 0)

 p = p + 1;

}

printf ("sum of prime num");

getch();

Output

-55
22
3
-3
4
11
16
-19
20

No of positiu num are = 6



21

Program 4:

```
#include <stdio.h>
#include <conio.h>
void main()
{
    int i, num[10], p;
    printf("Enter the value into array")
    for (i=0; i<10; i++)
    {
        if (num[i] > 2 == 1
            p = p+1
    }
    getch();
    printf("%d no. of odd numbers are %d", p);
}
```

output

52

Enter the value into array ::

2

3

4

5

6

7

8

9

no of odd number present = 5



program 5: To print matrix addition

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

```
# include <conio.h>
```

```
void main()
```

```
{
```

```
int x[3][3], y[3][3], z[3][3]
```

```
int r, c, u, t
```

```
printf("Enter no of matrix x: ")
```

```
for (r = 0; r < 3; r++)
```

```
{
```

```
for (c = 0; c < 3; c++)
```

```
{
```

```
scanf("%d", &x[r][c]);
```

```
}
```

```
}
```

```
printf("Enter no of matrix y: ")
```

```
for (r = 0; r < 3; r++)
```

```
{
```

```
for (c = 0; c < 3; c++)
```

```
{
```

```
scanf("%d", &y[r][c]);
```

```
}
```

```
}
```

```
such that
```

```
3
```

Solved
25/07/2021

output

$x=2$

3

4

5

2

3

{
}
3

$y=4$

1

5

6

7

8

1

3

matrix

2	6	9	9
11	9	10	
12	3	6	

F2

Practical no 6:

Aim: programs using string

Program I

#include <stdio.h>

#include <conio.h>

#include <string.h>

void main()

{

char name [20];

printf(" your name")

scanf("%s", &name)

printf(" my name is %s", name)

getch();

Program II

#include <stdio.h>

#include <conio.h>

#include <string.h>

void main()

{

printf(" story")

getch();

printf(" story is")

putchar;

getch();

54

Enter your name: Rishi

my name is ~~Rishi~~

Enter a string b73
The answer is 575-

point string in vertical order

include <string.h>
include <stdio.h>
include <conio.h>
void main()

{

char name[10] = " my name "

pointf (" my name is ")

for (int i=0 ; i<0 ; i++)

{

pointf ("~n")

putchar (name[i]);

{

getch();

}

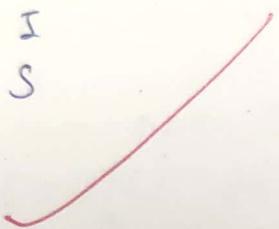


pdfelement

2.

my name is

M
Y
N
A
M
E
I
S



3.

P

F

H

A

Y

S

ch

pa

6c

g



4. Review

```
#include <stro.h>
#include <conio.h>
#include <string.h>
void main()
{
    char str[10];
    puts("Enter a string");
    gets(str);
    puts("The input string is: " str);
    getch();
}
```



56

From a string RISHI

~~The required string is ZHIZIR~~



57

5. print one char.

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

```
void main()
```

{

```
char a;
```

```
a = 'a';
```

```
printf("%c", a);
```

```
a = getch();
```

printf("%c\n", a); // the character is stored in a;

```
putchar(a);
```

```
getch();
```

}



27/25/02

26

Output

Enter a character

The character is : d



58

practical: 7

1. To calculate the circumference of circle.

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

```
#include < conio.h >
```

```
{
```

```
circle();
```

```
getch();
```

```
}
```

```
Void circle()
```

```
{
```

```
int r;
```

```
float a;
```

```
printf("value of r")
```

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

```
a = 3.14 * r * r
```

```
C = 2 * 3.14 * r
```

```
printf("area = %f", a);
```

```
printf("circumference = %f", C);
```

58

output

from the value 5

area = 28.500000

number ✓ 31.480000



59

```
#include <stdio.h>
#include <conio.h>
int get_noWords()
void main()
```

```
{  
    int m;  
    m = get_noWords();  
    printf("%d\n", m);  
    getch();  
}
```

```
int get_noWords()
{  
    int num;  
    printf("num");  
    scanf("%d", &num);  
    return (num);  
}
```

28

Output

Entered = 5

Error no. 5



83.

3. ~~#include < stdio.h >~~

~~#include < conio.h >~~

~~void abc (int n);~~

~~void main()~~

~~{~~

~~int n;~~

~~printf (" number ");~~

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

~~abc (n);~~

~~getch();~~

~~void abc (int n)~~

~~{~~

~~int s, f = 0~~

~~while (n != 0)~~

~~{~~

~~r = n % 10~~

~~s = s + r~~

~~n = n / 10;~~

~~}~~

~~Point f (" sum of digits = %d " s);~~

out per

number : 31

~~sum of digits~~ 4

60



```

## include <stdio.h>
## include <conio.h>
void average (int, int, int)
void sum (int, int, int)
void main()
{
    int a, b, c;
    point (x, y, z);
    sum (x, y, z);
    avg (x, y, z);
    void main (int, int, int);
    {
        int s;
        s = a + b + c;
        avg (s);
    }
    void avg (int sum)
    {
        float avg;
        avg = sum / 3.0;
        point (x, y, avg);
    }
}

```

Q8

Output
from the num_78
Sum of two num is : 15



S. #include <iostream>

#include <conio.h>

int factorial (int n);

void main()

{

clrscr();

int x, fact;

cout << "Enter value of x : "

scanf ("%d", &x);

fact = factorial (x);

cout << "Factorial of " << x << " = " << fact;

getch();

}

int factorial (int n);

{

int f;

if (n == 0 || n == 1)

return (1);

else

f = n * factorial (n - 1);

return (f);

}

pdfelement

output

62

~~Enter the value of $x = 4$
factorize of $x = 24$~~

~~8
25/02~~



63

Practical - 8

```
#include < stdio.h >
#include < conio.h >
struct Student
{
    int rollno;
    char name[20];
    int total;
};

void main()
{
    struct Student x;
    printf("Enter rollno");
    scanf("%d", &x.rollno);
    printf("Enter name");
    scanf("%s", x.name);
    x.total = 500;
    printf("Total marks %d", x.total);
    printf("Student Name: %s", x.name);
    printf("Total marks %d", x.total);
    getch();
}
```

50

Endr no of salr: 233

455557

Endr vno and salary: 3444

45555

both are ~~not correct~~



83

```

    #include <stdio.h>
    #include <conio.h>
    Struct employee
    {
        int emp_no, salary;
        char name[20];
    };
    main()
    {
        Struct employee n,y;
        printf("Enter Employee number and Salary");
        scanf("%d %d", &n.emp_no, &n.salary);
        if(n.emp_no == 123456 & n.salary == 23456)
            printf("Both are correct");
        else
            printf("Both are not correct");
    }

```

output

64

from emp and salary : 23

hs

from emp and salary 23

hs

both are equal.



program : 3

#include < stdio.h >

#include < conio.h >

struct fruit

{

char name[20];

int price; float quantity;

};

void main()

{

struct fruit f[5];

int i;

printf("Enter name price quantity")

for (i=0; i<5; i++)

{

scanf("%s %d %f", &f[i].name, &f[i].price, &f[i].quantity);

}

for (i=0; i<5; i++)

{

Pointf("Name = %s price = %d quantity = %f")

f[i].name;

, f[i].price, f[i].quantity);

}

getch();

}

48
3m more, price, & 90% +apple

43

56

bermuda

29

56

gum

59

23



pdfelement

22

h. #include <stdio.h>
 #include <conio.h>
 #include <string.h>
 Shunt calculator

{
 char name[20]; name[20]

int curpos

};

void menu()

{

char c;

start curpos p[5] {

int i; u, x;

printf("In player");
 for (i=0; i<s; i++)
 { x = strcmp(p[i], name); if (x) {

if (x>0);

ct = p[i];

p[i] = pcus

pcus = t; 333

printf("In function player names (%i)",

for (i=0; i<s; ++i)

{ printf("In %s %s %s at %i",

gush(i);

}

output

66

ms Dhoni	Ind	100
virat	Ind	100
Rohit	Ind	100
shikhar	Ind	100
Rahul	Ind	100

concern

ms Dhoni	Ind	100
virat	Ind	100
Rohit	Ind	100
shikhar	Ind	100
Rahul	Ind	100

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

```
#include < conio.h >
```

```
struct employe
```

```
{
```

```
    int salary;
```

```
};
```

```
struct employe
```

```
{ int id;
```

```
char Name [10];
```

```
struct employe b[2];
```

```
};
```

```
void main()
```

```
{
```

```
int i;
```

```
struct employe s[2] = { "Pavithra", 15000 };
```

```
printf ("In Run no %d Id %s Name = %s  
Salary %d")
```

```
for (i = 0; i < 2; i++)
```

```
{
```

8/10/2021

aa

Output

Roll no: 22 Name: RIRO Sales: 500

S:

8



53

Practiced 9:

```
1. #include <stdio.h>
#include <conio.h>
void main()
```

{

```
int a=12, b=4, x,y,*p,*q
```

```
p = &a
```

```
q = &b
```

```
x = *p + *q - 6
```

```
y = a + (*p - *q) + 10
```

```
printf ("a = %d, b = %d\n", a, b);
```

```
printf ("x = %d, y = %d\n", x, y);
```

```
printf ("a = %d, b = %d\n", a, b);
```

```
printf ("x = %d, y = %d\n", x, y);
```

```
getch();
```

3

pdfelement

output

a=12

b=4

x=42

y=42

68



```
#include <stdio.h>
#include <conio.h>
void main()
{
    int arr[5] = {10, 20, 30, 40, 50}
    int *p; i; sum = 0;
    p = arr;
    for (i = 0, i < 5; i++)
    {
        sum = sum + *p;
        p = p + 1;
    }
    printf ("The sum = %d", sum);
    getch();
}
```

```
#include <stdio.h>
#include <conio.h>
void main()
{
    int x = 20
    change (&x);
    printf ("The value of x = %d", x);
    getch();
}
```

void main (int *p)

$$\{ *p = *p + 10; \}$$

83

~~output~~

$$80m = 150$$

2.

~~# output~~

$$x = 30$$

3.

ear

4. #include < stdio.h >
#include < conio.h >
void main();
{
 int x, y;
 x = 10;
 y = 20;
 paroff("In before exchange - x = " + itoa(x) + ", y = " + itoa(y));
 exch(x, y);
 paroff("In after exchange - x = " + itoa(x) + ", y = " + itoa(y));
 getch();
}
void exch(int *a, int *b)
{
 int t;
 t = *a;
 *a = *b;
 *b = t;
}

output

before $x=10 \ y=20$,
after $\cancel{x=20} \ y=10$

70



pdfelement

25/02
25/02

Practical no. 10.

```

#include <stdio.h>
#include <conio.h>
#include <string.h>
int main()
{
    FILE *fp;
    char data[80];
    printf("Open the file test.(in the write mode)");
    fp=fopen("test.c", "w");
    if (fp == NULL)
        printf("could not open file. test.c");
    return 1;
    printf("\n Enter text from keyboard : do\n what is full");
    while (scanf("%s", &data) > 0)
    {
        fputs(data, fp);
        fputs("\n", fp);
    }
    printf("closing the file.c");
    fclose(fp);
    return 0;
}

```

05

~~# output~~

opening the file test.c in write mode
enter some text from keyboard to
write test.c

hi, my name is Rishi!
closing the file test.c



15

2. program using putw()

```
#include <stdio.h>
int main()
{
    file *fp;
    int i=1, j=2, n=3, num;
    fp=fopen ("test.c", "w");
    putw(i, fp);
    putw(j, fp);
    putw(n, fp);
    fclose(fp);
    fp=fopen ("test.c", "x");
    while (getw(fp)) i++;
    return 0;
}
```

pdfelement

output
opening the file. cin reads much
reading the file size. c++

72

hi my name is Rushi!
closing the file size. c++

output

data in file size is

1
2
3



73

ff include < stdio.h>
 #include < stdio.h>

{
 char name[20];
 int age, length;

FILE * fp;

fp = fopen ("data.dat", "w");

fprintf(fp, "%s %d", "fresh", 5);

length = fgetc(fp);

rewind(fp);

fclose(fp, "%s", Sage);

fclose(fp, "%s", &name);

fclose(fp);

pointf ("Name : %s \n age : %d", name, age)

point ("Total number of char in file %d",

length);

return 0;

}

10/25/09

8.5

27

Name: Jaskir refresh

age 25

total num of char is 15

