**1.**

**A.**

guest-s4lZ12@asus-CM1855:~$ cd Desktop

guest-s4lZ12@asus-CM1855:~/Desktop$ mkdir Shishir1

guest-s4lZ12@asus-CM1855:~/Desktop$ mkdir shishir2

guest-s4lZ12@asus-CM1855:~/Desktop$ touch 19101222\_1.txt

guest-s4lZ12@asus-CM1855:~/Desktop$ touch 19101222\_2.txt

guest-s4lZ12@asus-CM1855:~/Desktop$ touch 19101222\_3.txt

guest-s4lZ12@asus-CM1855:~/Desktop$ touch 19101222\_4.txt

guest-s4lZ12@asus-CM1855:~/Desktop$ cd Shishir1

guest-s4lZ12@asus-CM1855:~/Desktop/Shishir1$ cd ..

guest-s4lZ12@asus-CM1855:~/Desktop$ mv 19101222\_1.txt ~/Desktop/Shishir1

guest-s4lZ12@asus-CM1855:~/Desktop$ mv 19101222\_2.txt ~/Desktop/Shishir1

guest-s4lZ12@asus-CM1855:~/Desktop$ mv 19101222\_3.txt ~/Desktop/Shishir1

guest-s4lZ12@asus-CM1855:~/Desktop$ cd Shishir1

guest-s4lZ12@asus-CM1855:~/Desktop/Shishir1$ cp 19101222\_1.txt ~/Desktop/shishir2

guest-s4lZ12@asus-CM1855:~/Desktop/Shishir1$ cp 19101222\_2.txt ~/Desktop/shishir2

guest-s4lZ12@asus-CM1855:~/Desktop/Shishir1$ cd ..

guest-s4lZ12@asus-CM1855:~/Desktop$ mkdir Shishir3

guest-s4lZ12@asus-CM1855:~/Desktop$ cp -R ~/Desktop/Shishir1 ~/Desktop/Shishir3

guest-s4lZ12@asus-CM1855:~/Desktop$ cd Shishir3

guest-s4lZ12@asus-CM1855:~/Desktop/Shishir3$ la -la

guest-s4lZ12@asus-CM1855:~/Desktop/Shishir3$ chmod g+rx-w ./\*

guest-s4lZ12@asus-CM1855:~/Desktop/Shishir3$ chmod o+rx-w ./\*

guest-s4lZ12@asus-CM1855:~/Desktop/Shishir3$ cd ..

guest-s4lZ12@asus-CM1855:~/Desktop$ ls –l

guest-s4lZ12@asus-CM1855:~/Desktop$ rm –rf ./\*

**B.**

guest-s4lZ12@asus-CM1855:~/Desktop$cat >courseinfo.txt

cse321

operating system

section:04

cse423

Computer Graphics

section:05

cse421

Computer Networks

section:04

CSE 461

introduction to Robotics

section:08

^Z

[1]+ Stopped cat > courseinfo.txt

guest-s4lZ12@asus-CM1855:~/Desktop$ grep "cse" courseinfo.txt -c

**C.**

guest-s4lZ12@asus-CM1855:~/Desktop$ cd ..

guest-s4lZ12@asus-CM1855:~$ ls -a

.config .mozilla .ssh .vboxclient-seamless.pid .. Desktop Music .sudo\_as\_admin\_successful Videos .bash\_history Documents Pictures Templates .bash\_logout Downloads .profile .vboxclient-clipboard.pid .bashrc .gnupg Public .vboxclient-display-svga-x11.pid .cache .local snap .vboxclient-draganddrop.pid

**D.**

guest-s4lZ12@asus-CM1855:~/Desktop$ touch file.txt

guest-s4lZ12@asus-CM1855:~/Desktop$ cat >file.txt

l1

l2

l3

l4

l5

l6

l7

l8

l9

l0

l11

l12

l13

l14

l16

l15

l17

l18

^Z

[1]+ Stopped cat > file.txt

guest-s4lZ12@asus-CM1855:~/Desktop$ sed -n '5,17p' file.txt

l5

l6

l7

l8

l9

l0

l11

12

l13

l14

l16

l15

l17

**2.**

**a.**

**i.**

int main() {

int a, b, result;

scanf("%d", &a);

scanf("%d", &b);

if(x>y)

{

result=a-b;

printf("%.1d\n", result);

}

else {}

return 0;

}

**Ii.**

int main() {

int a, b, c, result;

scanf("%d", &a);

scanf("%d", &b);

scanf("%d", &c);

if(c<b)

{

result=c+b;

printf("%.1d\n", result);

}

else {}

return 0;

}

**Iii.**

int main() {

int a, b, c, result;

scanf("%d", &a);

scanf("%d", &b);

scanf("%d", &c);

if(c==b)

{

result=b\*c;

printf("%.1d\n", result);

}

else {}

return 0;

}

**b.**

int main()

{

char str[200];

int i, j, len;

printf("Enter a String: ");

gets(str);

len = strlen(str);

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

{

if(str[0]==' ')

{

for(i=0; i<(len-1); i++)

str[i] = str[i+1];

str[i] = '\0';

len--;

i = -1;

continue;

}

if(str[i]==' ' && str[i+1]==' ')

{

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

{

str[j] = str[j+1];

}

str[j] = '\0';

len--;

i--;

}

}

printf("\nNew String = %s", str);

getch();

return 0;

}

**C.**

#include<iostream>

#include<string>

using namespace std;

int main(){

string password;

cin>>password;

int lc=0,uc=0,dc=0,sp=0;

/\*for loop till length of string \*/

for(int i=0;i<password.length();i++){

/\*checking different condition wheather it is uppercase lowercase, digit or special\*/

if(password[i]>='a' && password[i]<='z'){

lc++; /\*increment a lowercase counter \*/

}

else if(password[i]>='A' && password[i]<='Z'){

uc++;/\*increment a upercase counter \*/

}

else if(password[i]>='0' && password[i]<='9'){

dc++; /\*increment a digit counter \*/

}

else if(password[i]=='#' ||password[i]=='@'||password[i]=='$'||password[i]=='\_'){

sp++; /\*increment a special character counter \*/

}

}

/\*empty string \*/

string str="";

int count=0;

if(lc<1){

str=str+"Lowercase character missing";

count=count+1;

}

if(uc<1){

if(count>0)

str=str+", ";

str=str+"Uppercase character missing";

count=count+1;

}

if(dc<1){

str=str+"Digit missing";

count=count+1;

}

if(sp<1){

if(count>0){

str=str+", ";

}

str=str+"Special character missing";

count=count+1;

}

if(count==0){

cout<<"OK";

}

else

cout<<str;

}

**E.**

#include <stdio.h>

#include <string.h>

int main()

{

char str[30],\*a,\*b;

printf("Enter any string\n");

gets(str);

a=str+strlen(str);

b=str;

a--;

while(a>=b)

{

if(\*a==\*b)

{

a--;

b++;

}

else

{

break;

}

}

if(b>a)

{

printf("Palindrome",str);

}

else

{

printf("Not Palindrome",str);

}

return 0;

}