**ID: 021202076**

**LabSheet-4**

**1.**

#include <stdio.h>

#include <stdlib.h>

int main()

{

int i,j;

for (i=1; i<300; i++)

{

for (j=2; j<i ; j++)

{

if((i%j) == 0)

{

break;

}

}

if (i==j)

{

printf("%d ",j);

}

}

}

**2.**

#include <stdio.h>

#include <stdlib.h>

int main()

{

{

int a,b,c;

for(a=1; a<=3; a++)

{

for(b=1; b<=3; b++)

{

for(c=1; c<=3; c++)

{

if((a!=b) && (b!=c) && (c!=a))

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

}

}

}

}

return 0;

}

**3.**

#include <stdio.h>

#include <stdlib.h>

int main()

{

int a,b,line ;

printf("Please enter how much number of lines are you taken: ");

scanf("%d",&line);

for (a=1; a<=line; a++)

{

for (b=1; b<=a; b++)

{

printf("%d",b);

}

printf("\n");

}

return 0;

}

**4.**

#include <stdio.h>

#include <stdlib.h>

int main()

{

int n,r,i;

long long int nPr , n\_factorial=1, nr\_factorial=1;

printf("Please enter any two positive value for n and r: ");

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

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

{

n\_factorial \*=i;

}

for (i=1; i<=(n-r); i++)

{

nr\_factorial \*=i;

}

nPr = n\_factorial/nr\_factorial;

printf("The value of %dP%d is = %lld ",n,r,nPr);

return 0 ;

}