

2(a) #include <stdio.h>

```

int main()
{
    int n, i, y;
    int s = 0, y = 0;
    printf("Enter the value of n: ");
    scanf("%d", &n);
    for (i=0; i<n; i++)
    for (i=1; i<n+1; i++)
    {
        y = 1/i;
        s = s + y;
    }
    printf("The sum of the series is: %d", s);
    return 0;
}

```

2.57

PTO.

Pg #1

~~(n × 2) - 1~~

<stdio.h> should be (b) L

for (int i = 0; i < n; i++) {  
 for (int j = 0; j < i; j++) {  
 cout << " \* ";  
 }  
 cout << endl;  
}

2.(b) #include <stdio.h>

int main()

{ int n, i, j, k = 0, l;

printf ("Enter the number of rows: ")

scanf ("%d", &n);

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

{

for (j = 0; j < n - i; j++) {  
 printf (" \* ");

}

for (k = 0; k < (i + 2) - 1; k++) {  
 printf (" \* ");

for (l = 0; l < n - i; l++)

{ printf (" ");

printf ("\n");

}

return 0;

1. (a) #include <stdio.h>

```
void Hsalary()
int main()
struct emp {
```

```
    int id;
```

```
    int age;
```

```
    int sal;
```

```
} employee[1000];
```

(b) ~~void~~ <sup>int</sup> Hsalary(struct emp employee[1000], int n)

```
{
```

```
    int max=0;
```

```
    int i;
```

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

```
{
```

```
    If (max < employee[i].sal)
```

```
{
```

```
        max = employee[i].sal;
```

```
}
```

```
printf ("The Highest Salary = %d", max);
```

```
}
```

PTO.

P2+1

1(c) #include <stdio.h>  
int main()

{

char fname[20];  
char lname[20];  
int age;

FILE \*fp;

fp = fopen("output.txt", "w");

printf("Enter first name: ");

scanf("%s", &fname);

strcpy(fp, fname);

fprintf(fp, "%s");

printf("Enter last name: ");

scanf("%s", &lname);

strcpy(fp, lname);

fprintf(fp, "%s");

printf("Enter the age: ");

scanf("%d", &age);

fprintf(fp, "%d", age);

printf("File successfully written");

fclose(fp);

return 0;

}

3. (a) #include <stdio.h>

int main

{

int A[10];

int sum=0;

int i.

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

{

printf ("Enter the element %d : ", i+1);

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

If (A[i] % 2 == 1)

{

Sum = sum + A[i];

}

}

printf ("Sum of odd numbers = %d", sum);

return 0;

3(b) #include<stdio.h>

int main()

{

int A[6][6];

int i, j;

int sum = 0;

for (i=0; i<6; i++)

{

for (j=0; j<6; j++)

{

printf ("Enter element of row %d and column %d: ", i+1, j+1);

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

if (i == j)

{

sum = sum + A[i][i];

}

}

printf ("Sum of the diagonal = %d ", sum);

return 0;

}

4. (a) ~~#include <stdio.h>~~

```

int main()
void Rmax(int float n);
int main()
{
    int i, max;
    float a[3];
    for (i=0; i<3; i++)
    {
        printf("Enter a number: ");
        scanf("%f", &a[i]);
        max = Rmax(a[i]);
    }
    printf("Maximum number = %f ", max);
    return 0;
}

void Rmax(float float n)
{
    int h=0;
    if (h>n)
    {
        h=n;
    }
    else
    {
        h=n;
    }
    return h;
}

```

4 b) #include <stdio.h>  
void hanoi(int n);  
{  
 int n;  
 n = hanoi(3);  
 ~~return~~ printf ("hanoi(3)= %d", n);  
}

void hanoi(int n)  
{  
 if (n == 1)  
 {  
 ~~return~~  
 return 1;  
 }  
 else  
 {  
 ~~return~~  
 hanoi(n) = 2 \* hanoi(n-1) + 1;  
 }  
}

(T = [i]0)  
(P = [i]2)  
(O = [i]2)  
(W = [i]2)

5(a) #include <stdio.h>  
 int main()  
 {  
 char s[50];  
 int i;  
 printf("Enter a string: ");  
 scanf("%s", s);  
 for (i=0; i<50; i++)  
 {  
 if ((s[i] == 'a') || (s[i] == 'e') || (s[i] == 'i'))  
 {  
 if (s[i] == 'o') || (s[i] == 'u')  
 {  
 if (s[i] == 'a')  
 {  
 s[i] = 'A';  
 }  
 else if (s[i] == 'e')  
 {  
 s[i] = 'E';  
 }  
 else if (s[i] == 'i')  
 {  
 s[i] = 'I';  
 }  
 else if (s[i] == 'o')  
 {  
 s[i] = 'O';  
 }  
 else if (s[i] == 'u')  
 {  
 s[i] = 'U';  
 }  
 }  
 }

5a Continuation:

```
printf ("Modified String: %s", s);  
return 0;
```

}

5(b)

→ X →

Var = 5, \*ptr = 29642

Var = 5, \*ptr = 09645

Var = 5, \*ptr = 1029645, arr[0] = 10

Var = 5, \*ptr = 29648, arr[0] = 10

Var = 5, \*ptr = 29651, arr[0] = 10

Total \_\_\_\_\_

Examiner's Signature \_\_\_\_\_

Date \_\_\_\_\_

**Instructions:**

1. Use of mobile phones is strictly prohibited.

2. Students may not leave the examination room within the first 30 minutes of the examination and may not leave during the last 15 minutes of the examination.

3. Please do not borrow or lend any item during the examination.

Do not use any unfair means. If you cheat in any way or do not follow faculty instructions your examination will be cancelled.

6. #include <stdio.h>

int main()

{ int n;

printf ("Enter an integer: ");

scanf ("%d", &n);

if (n % 2 == 0)

{ printf ("EVEN");

}

else

{

printf ("ODD");

}

return 0;

}