

Ans. to the q. no 1

```
#include <stdio.h>
int main() {
    int r = 23;
    float pi = 22.0f / 7.0f;
    float v = (4.0f / 3.0f) * pi * r * r * r;
    printf("The value v is %f\n", v);
    getch();
    return 0;
}
```

(P.T.O)

Ans. to the q. no- 2

```
#include <stdio.h>
int main() {
    int egg_sold[4] = [34, 37, 33, 31];
    int total_eggs_sold = 0;
    float average_eggs_sold;
    for (int i = 0; i < 4; i++) {
        total_eggs_sold += egg_sold[i];
    }
    average_eggs_sold = (float) total_eggs_sold / 4;
    printf("Average eggs sold is: %.f \n",
           average_eggs_sold);
    getch();
    return 0;
}
```

Ans. to the q. no-3

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

int main() {
    int student_weights[10];
    int weight_to_find;
    int found = 0;
    printf("Enter the weight of 10 students:\n");
    for (int i = 0; i < 10; i++) {
        scanf("%d", &student_weights[i]);
    }
    printf("Enter the weight you want to find:\n");
    scanf("%d", &weight_to_find);
    for (int i = 0; i < 10; i++) {
        if (student_weights[i] == weight_to_find) {
            found = 1;
            break;
        }
    }
}
```

(P.T.O.)

```
if (found == 1) {  
    printf("The weight %d is found.\n",  
           weight_to_find);  
}  
else {  
    printf("The weight %d is not found.\n",  
           weight_to_find);  
}  
getchar();  
return 0;  
}
```


Ans. to q. no - 4

The code does not include

include <stdio.h>

technically the program may compile and run without this, as it assumes implicit declaration of functions such as "printf" and "scanf"

int main < > should be replaced by int main ()

~~int number;~~ ~~int~~ char symble; ok
~~are ok~~ but int number ~~;~~; create array
~~for (int i = 1; i <= 10; i++)~~ { should
be changed to

for (int i = 1; i <= 10; ~~i++~~ i++) {

scanf("initial") should be changed

to scanf ("%d", &number)
~~number[i]~~

(P.T.O)

printf (symbol); changed to
printf ("%c", symbol = (char) number;
printf ("\n"); \rightarrow printf ("\n");

} are ok

} the program can be rewritten as

```
int main () {  
    int number;  
    int char symbol;  
    for (int i = 1; i <= 10; i++) {  
        scanf ("%d", &number);  
        printf ("%c", symbol = (char) number);  
        printf ("\n");  
    }
```

// This C code can take 10 integers from
// user then print the ASCII characters
(cast) correspondingly.

Ans. to the q. no- 5

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

```
int main() {
```

```
int n;
```

```
printf("Enter the number of elements n: ");
```

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

```
if (n <= 0) { printf("Please enter a positive  
integer for n. \n");  
return 1; }
```

```
long long sum = 0;
```

```
long long term = 8;
```

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

```
    sum += term;
```

```
    term = term * 10 + 8; }
```

```
printf("Value of first %d is: %lld", n, sum);
```

```
getchar();
```

```
return 0; }
```


Ans. to the q. no-6

```
#include <stdio.h>
int main () {
    File *meseFile = fopen("MCESE.txt", "r");
    if (!meseFile) {
        printf("Error opening file MCESE.txt.\n");
        return 1;
    }
    File *avgMCESEFile = fopen("AvgMCESE.txt", "w");
    if (!avgMCESEFile) {
        printf("Error opening file AvgMCESE.txt.\n");
        fclose(meseFile);
        return 1;
    }
    int rollNumber;
    int marks[5];
    float avg averageMarks;
    while (fscanf(meseFile, "%d %d %d %d %d %d\n",
        &rollNumber, &marks[0], &marks[1],
        &marks[2], &marks[3], &marks[4]) == 6)
        (P.T.O.)
```



```
{ if (marks[0] == 0 && marks[1] == 0 && marks[2]
    == 0 && marks[3] == 0 && marks[4] == 0)
{ printf("Warning: Division by zero for
    roll roll number %d, skipping.\n",
    roll Number);
    continue; }
averageMarks = (marks[0] + marks[1] + marks[2]
    + marks[3] + marks[4]) / 5.0f;
fprintf (avgMCEFile, "%d %.2f\n", roll Number
    , averageMarks); }

fclose (meseFile);
fclose (avg MCEFile);
return 0;
}
```