**REVISION 3 SOLUTIONS**

**Question 1**

#include<stdio.h>

int main()

{

int in, X[20], n1, n2;

for (n1 = 0; n1 < 20; n1++)

{

printf("Enter a number between 10 - 100: ");

scanf("%d", &X[n1]);

if (n1 != 0)

{

for (n2 = 0; n2 < n1; n2++)

{

if (X[n1] == X[n2])

{

break;

}

}

}

else

{

printf("%d\n", X[n1]);

}

if (n2 == n1)

{

printf("%d\n", X[n1]);

}

}

return 0;

}

**Question 2**

// Write to file tools.txt

#include<stdio.h>

int main()

{

FILE \*ptr;

ptr = fopen("tools.txt", "w");

int n,q;

float c;

char tool[50];

for (n = 1; n <= 8; n++)

{

fprintf(ptr, "%d ", n);

printf("Enter the tool name: ");

scanf("%s", tool);

fprintf(ptr, "%s ", tool);

printf("Enter the quantity: ");

scanf("%d", &q);

fprintf(ptr, "%d ", q);

printf("Enter the cost: ");

scanf("%f", &c);

fprintf(ptr, "%.2f\n", c);

}

return 0;

}

// Read from file tools.txt

#include<stdio.h>

int main()

{

FILE \*ptr;

ptr = fopen("tools.txt", "r");

int n,q,count;

float c,total=0;

char tool[50];

for(count=1;count<=8;count++)

{

fscanf(ptr, "%d", &n);

fscanf(ptr, "%s", tool);

fscanf(ptr, "%d", &q);

fscanf(ptr, "%f", &c);

total = total + q \* c;

}

printf("The total cost is %.2f\n", total);

return 0;

}