Question1

```
#include<stdio.h>

int main()
{
  int marks;
  // Program to Find Grade of a Student Using Switch Case
  printf("\nEnter The Marks Between 0 To 100:");

  printf("\nEnter The Mark: ");
  scanf("%d", &marks);

  if(marks>100)
  {
   //Marks greater than 100
   printf("\nEnter your Marks Between Limit\n");
  }
  else
  {
  switch(marks/10)
  {
     case 10 :
     case 9 :
        // Marks between 90-100
        printf("\n Your Grade is: A+");
        break;
     case 8 :
         // Marks between 80-89
        printf("\n Your Grade is: A" );
        break;
     case 7 :
        // Marks between 70-79
        printf("\n Your Grade is: B+" );
        break;
     case 6 :
        //Marks between 60-69
        printf("\n Your Grade is: B" );
        break;
     case 5 :
         // Marks between 50-59
        printf("\n Your Grade is: C+" );
        break;
     case 4 :
        // Marks between 40-59
        printf("\n Your Grade is: C");
        break;
     case 3 :
         // Marks between 30-39
         printf("\n Your Grade is: C");
     default :
        // Marks less than 30
        printf("\n You Grade is: F or Fail\n");
```

```
   }
 }
   return 0;
}
```

Question2

```
#include <stdio.h>

int main()
{
    char a;

    printf("Enter a character: ");
    scanf("%c",&a);

    //condition to check character is alphabet or not
    if((a>='A' && a<='Z') || (a>='a' && a<='z'))
    {
        //check for VOWEL or CONSONANT
        switch(a)
        {
            case 'A':
            case 'E':
            case 'I':
            case 'O':
            case 'U':
            case 'a':
            case 'e':
            case 'i':
            case 'o':
            case 'u':
                printf("%c is a vovel.\n",a);
                break;
            default:
                printf("%c is a consonant.\n",a);
        }
    }
    else
    {
        printf("%c is not an alphabet.\n",a);
    }

    return 0;
}
```

Question3

```
#include <stdio.h>
int main(){
int amount;
int debit;
int Credit;
int mainbalance;
int Option;
printf("Deposit your initial amount : ");
scanf("%d", &amount);
if(amount > 1000){
printf("1. Credit \n");
printf("2. Debit \n");
printf("1. Balance enquiry \n");
printf("Enter your option : ");scanf("%d", &Option);
switch(Option){
case 1:
printf("Enter the amount you want to credit : ");
scanf("%d", &Credit);
mainbalance = amount + Credit;
printf("Your bank balance is : %d", mainbalance);
break;
case 2:
printf("Enter the amount you want to debit : ");
scanf("%d", &debit);
mainbalance = amount - debit;
if(mainbalance < 0){
printf("Your bank balance is zero");
}
else{
printf("Your bank balance is : %d", mainbalance);
}
break;
case 3:
printf("Your bank balance is : %d", amount);
break;
default:
printf("Your option is out of choice");
}
}
else{
printf("Your initial amount is not enough to deposit");
}
}
```

Question4
Question4

```
#include <stdio.h>
int checksize(intType,floatType,doubleType,charType,shortType,longType)
int intType;
float floatType;
double doubleType;
char charType;
short shortType;
long longType;
{
// sizeof evaluates the size of a variable
printf("Size of int: %ld bytes\n", sizeof(intType));
printf("Size of float: %ld bytes\n", sizeof(floatType));
printf("Size of double: %ld bytes\n", sizeof(doubleType));
printf("Size of char: %ld byte\n", sizeof(charType));
printf("Size of short: %ld byte\n", sizeof(shortType));
printf("Size of long: %ld byte\n", sizeof(longType));
}
int checksignedsize(charType1,longType1,shortType1)signed short shortType1;
signed long longType1;
signed char charType1;
{
printf("Size of signed-short: %ld bytes\n", sizeof(shortType1));
printf("Size of signed-long: %ld bytes\n", sizeof(longType1));
printf("Size of signed-char: %ld byte\n", sizeof(charType1));
}
int main(){
int intType;
float floatType;
double doubleType;
char charType;
short shortType;
long longType;
signed short shortType1;
signed char charType1;
signed long longType1;
checksize();
checksignedsize();
```